

AUG 8 1979



IN THE UNITED STATES DISTRICT COURT

JOHN P. HEHMAN, Clerk
WESTERN DISTRICT OF MICHIGAN

NORTHERN DIVISION

UNITED STATES OF AMERICA, et al,)

Plaintiffs,)

-vs-)

STATE OF MICHIGAN, et al,)

Defendants.)

No. M 26-73 C.A.
U.S.D.C.

89-1414

The Deposition of CHARLES E. CLELAND, Ph.D.,

witness called by Defendant State of Michigan, taken before
Dorothy J. Falk, Certified Court Reporter and Notary Public,
in the 8th floor Conference Room, Mason Building, Lansing,
Michigan, on Monday, December 13, 1976, at the hour of
10:00 A.M.

APPEARANCES:

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In behalf of Plaintiff.

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In behalf of Defendant State of Michigan.

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By
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In behalf of Defendant
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In behalf of Plaintiff Intervenor
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In behalf of Plaintiff Intervenor
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In behalf of Plaintiff Intervenor
Sault Ste. Marie Tribe of Chippewa Indians.

ALSO PRESENT:

ELMER T. NITZSCHKE
U.S. Department of Interior.

PHILIP P. MASON, Ph.D.
Wayne State University.

Lansing, Michigan

Monday, December 13, 1976

10:00 A.M.

(R E C O R D)

C H A R L E S E. C L E L A N D, P h. D.

having been first duly sworn, testified as follows:

EXAMINATION

BY STEWART H. FREEMAN, Esq.:

Q Witness, would you state your full name for the record?

A Charles Edward Cleland.

Q Where are you employed?

A Michigan State University.

Q In what capacity are you employed?

A I'm employed as a Professor of Anthropology, Curator of Anthropology, and Professor of Racial and Ethnic Studies.

Q What is your educational background in terms of professional degrees?

A I have an MS in Zoology, an MA in Anthropology, a Ph.D. in Anthropology.

Q Where did you obtain your Bachelor's Degree?

A Denison University, 1958.

Q And what was your major?

A Biology.

Q And your Master's Degree, where did you obtain that?

A University of Arkansas, 1960, in Zoology.

Q And your Ph.D.?

A University of Michigan, 1966, in Anthropology.

Q What has your professional employment been?

A As a teacher of Anthropology and a Museum Curator.

Q Since when?

A Since 1965.

Q You have been in the same capacity since '65?

A Yes, sir.

Q Are you a tenured Professor?

A Yes, I am.

Q Did you, as an undergraduate, do any research into general questions of the aboriginal population of Michigan?

A No, sir, I did not.

Q Did you, in connection with study for your Master's Degree, do such research?

A No, I did not.

Q Did you, in connection with obtaining your Ph.D., do such research?

A Yes, I did.

Q What type of research did you do?

A I did research in Paleo Ecology and Ethnozoology.

Q Would you define those two terms for us?

A Paleo Ecology is the study of former environments, the changing ecology of the past. Ethnozoology is the study of the use of animal materials and products within an

ethnic situation.

Q When did you first commence studies into those two areas?

A In 1958.

Q What type of research did you do?

A I started studying the food remains of the Prehistoric Indians in Arkansas and continued that in Michigan.

Q Well, when did you begin in Michigan? What was the commencement?

A 1960.

Q 1960. How did you study food remains in Michigan?

A Ah . . . in two ways: First of all, by looking at the remains of food animals that had been preserved in archaeological sites, and secondly, by studying the ethnographic and historic records that pertain to how Indian peoples utilize various species in their diet.

Q Where did you commence your field research?

A You mean specifically where in the field, or --

Q Yeah.

A Saginaw, the summer of 1960.

Q And roughly, how many areas of the State have you examined that way in terms of broad geographic areas, counties or however you can answer the question?

A . . . Well, I have had experience in a number of areas of the State from the northern part of the Upper Peninsula through most of the southern peninsula, you know, dozens.

Q Dozens? That's dozens of sites? What sort of sites were these, these dozens of sites?

A These were sites that are camps, villages, burial grounds, quarries of Prehistoric Indian inhabitants of the State, and also, in some cases, Historic Indian inhabitants.

Q Would you define for us the difference between Prehistoric and Historic, as you just used those terms?

A Yes. As I just used them, Historic would refer to that period for which we have some documentary records; Prehistoric being that period where no such records exist.

Q Am I correct, then, that the Prehistoric Period would be the period where there is really no independent evidence, whereas in Historic Period there is independent evidence available?

A I really don't understand what you mean by independent evidence.

Q Other than what you find at the burial site or the campsite.

A Such as?

Q Well, what do you find? Let's go through it, then. You go to a burial site, what do you find, using the specific?

A What we find is the portions of those cultures which have been preserved, namely, this is the non-organic part of the culture. Namely, we don't find religious systems preserved; we don't find economic systems preserved.

We find artifacts preserved.

Q What do you find relating to what types of food people ate?

A Plant and animal remains.

Q Those would be organic, though, wouldn't it?

A Yes.

Q So you do, in some cases, find organic remains?

A Oh, yes.

Q About how many sites have been examined, if you can recall, within the -- well, strike that.

Are you familiar with the area that we generally, for purposes of this litigation, refer to as the Treaty area, the area covered by the Treaty of 1836?

A Generally familiar, yes.

Q How many sites, generally, have you examined within that Treaty area?

A Dozens.

Q How many of those areas that you have examined were burial sites?

A One.

Q And how many were encampment sites?

A As opposed to?

Q Permanent villages.

A A very small number.

Q Then, would the majority of the sites you have examined

have been village sites?

A Yes.

Q What kind of things, generally, did you find in the village sites?

A Generally, hearths, refuse pits, storage pits.

MR. STEKETEE: What was the --

THE WITNESS: Hearths, fireplaces, storage pits, refuse pits, post-mold patterns which indicate the outlines of houses, and find activity areas of various kinds marked by concentrations of pottery coming from the manufacturing process of making pottery or cooking activities. We find lithic workshop areas where stone tools of various descriptions were being manufactured, and there is a long list of those. We found the remains of plant foods that were primarily charred and located in fireplaces, and also the remains of animal bones, which represent subsistence activities of various kinds.

Q Were you able to place, generally, the Historic Period of these various village sites?

A Yes.

Q What is the range, historical range we are dealing with?

A From about 16 . . . say, 1680 through -- well, into modern times.

Q You found no village sites which you concluded had been established prior to 1680?

A Oh, no, many prior to that. You said Historic, so I assumed that you meant --

Q Pardon me. Pardon me. All right. What would be the total range, historically and Prehistoric?

A The total range would be from -- Are you talking now of the Treaty area, what you described as the Treaty area?

Q Yeah.

A From approximately seven to eight thousand B.C. until modern times.

Q How many village sites did you find that you regard as having been established in the general period of seven or eight thousand B.C.?

A I would consider --

MR. DILLON: I'd like to object right here until you could, if you could, lay a proper foundation. You say, "as you describe the Treaty area." I don't think there's been any agreement between the two of you as to what the Treaty area encompasses. Otherwise, the questions are just in a void. I don't know if you two agree on that same terminology.

MR. FREEMAN: Of course, it's your witness. The United States has some doubts!

MR. DILLON: Well, he said, "as you describe the Treaty area."

MR. FREEMAN: I'm agreeable to that.

Q (MR. FREEMAN) If I had asked you the question involving -- all of the questions I have just asked you, if I had asked them involving the entire State of Michigan, would you have changed any of the answers?

A Yes.

Q Which ones would you have changed?

A The range of Prehistoric occupation, the kind and size of sites and so forth.

Q All right. What is the range of Prehistoric occupation for the entire State?

A About 12,000 years.

Q Where was the oldest site you found?

A In the southern part of the State, the southern third of the Lower Peninsula.

Q Can you be more specific about where that site was?

A It's the Holcomb site, Macomb County.

Q And what did you find at that site?

A Hmm . . . A number of small fireplaces, lithic debris.

MR. STEKETTE: What do you mean by that?

THE WITNESS: Flint chips, just the waste products that come from making flint tools. In this case lanceolate-type projectile points that we know, from evidence of that site, were used to hunt ^{barren} ~~burying~~ ground caribou. We found the remains of those animals in their fireplaces.

Q (MR. FREEMAN) What kind of remains did you find?

A Bones, charred bones.

Q How were these bones identified as being caribou and bear?

A By -- "and bear"?

Q Isn't that what you said?

A No, no. Caribou.

Q How was the identification made?

A Through a comparative process, basically by taking the bones and looking at known modern bones of that species and simply comparing the morphology of the two.

Q Do you personally make that kind of evaluation?

A Yes, I do.

Q So you took the caribou bone and compared it to a known caribou bone?

A Right.

Q Where was the known caribou bone located?

A It was in the collections of the University of Michigan.

Q Is that the standard way of making the --

A Yes, it is.

Q -- kind of identifications?

Was that the primary bone find there, caribou?

A Yes.

Q Did you find evidence of the type of weapon the hunters used?

A. Insofar as the types of the projectiles were found, yes.

Q. And I take it from your use of the word projectile, that it was something in the neighborhood of a spear?

A. Yes.

Q. Were you able to drawn any conclusions as to who the inhabitants of that site were?

A. Who in what sense?

Q. A known prehistoric population group with a name.

A. We call them Paleo-Indians.

Q. What does that term mean?

A. That means that the material that was recovered from that site is similar in every way, or almost every way, to similar material that has been found over most of North America, at that particular time period.

Q. How do you fix the time period?

A. In this specific case?

Q. Yeah.

A. By analogy and by geomorphology.

Q. You're going to have to define that for me.

A. By geomorphology -- They're both, both the type of, oh, logical analogy and geomorphology is based upon the fact that somewhere other implements of these kinds have been associated with the radiocarbon dates, for example, so that if we know that projectile points like these have been dated at three other places at 10,000 B.C., then we

say this site dates to 10,000 B.C. That's one method. The other method was by the geomorphological position, namely, that this site happens to be located on the shore of an ancient lake. Geologists can tell us when that lake was in that particular bed, when the beach was formed, and since that date corresponds with the radiocarbon date from other places, we are fairly sure.

Q Let me make sure I understand that. You assume that the village would not have been located there prior to the time the lake was there.

A Yes.

Q You asked one of your professional colleagues, who has a specialization in geology, to give you an estimated date of when the lake was there, and then cross-checked that date with carbon data.

A Right.

Q I realize I'm putting this in simple terms. Do I have the idea?

A That's the idea, yes.

Q Okay. When you make these kinds of comparisons to other known sites, do you personally examine the other known sites, or do you rely upon research done by other professionals?

A There's no hard and fast rule.

Q Well, what do you do?

A Well . . .

Q In this specific site, let's make it specific as to this site, how did you do it?

A Well, I mean, I'm at a loss to know how to answer that question. I mean, it's like, I suppose in your business if you cite a particular case you don't have to -- you can go through the literature, you don't have to go talk to each lawyer that participated in each case.

Q You're correct, in my field. I'm simply trying --

A It's the same way in my field.

Q -- to understand how you do it.

Then would you -- Let me try the question this way: Would you normally, in doing such comparison, go out into the field and examine the other sites, or would you read the literature and rely upon the published literature in your specific area?

A Normally you would rely upon the other literature, but in the experience of most archaeologists, they have, at one time or another, the occasion to visit and have firsthand experience with similar material.

Q Do you find that, in the professional literature that you rely upon, that all of your professional peers are of equal competence?

A No, of course not.

Q There are some people who write and publish in your area

who have the appropriate academic credentials but whose conclusions or as to whose conclusions you have some misgivings or caveats?

A I don't think it's possible to answer a question like that in general terms.

Q Who do you rely upon when you make comparisons, you, personally; which other writers in your area?

A It would depend upon the problem that I wanted to try to examine.

Q Well, if the problem --

A I mean, not all people are competent in all areas of this immense field.

Q Who were the competent professionals in regard to the Prehistorical Period in Michigan?

A Well, there are a great many. If you wanted to name some, I'm sure that I would find that they were competent individuals.

Q Did you rely upon, in your examination of specific sites in Michigan, did you rely upon the writings of any other professionals?

A Of course, many.

Q Can you tell me who you relied upon most frequently?

A No, I can't.

MR. GREENE: May I make a suggestion, Counsel, to refer you to a bibliography, I believe, that

is attached to the report that's been prepared by Dr. Cleland. There are quite a number of references that apparently he relied upon to some extent.

MR. FREEMAN: The word "apparently" is significant. I have read the list. Now I'm asking the witness a question.

Q (MR. FREEMAN) If we exclude from our discussion, roughly, the lower one-third of the State of Michigan, what would be the oldest site you examined within the remainder of the State?

A About 8,000.

Q And where was that site located?

A Near Petoskey.

Q What kind of a site was it?

A It was a site from which -- I've forgotten the exact number, but a very few artifacts typical of what we call the Early Archaic were found.

MR. STEKETEE: Excuse me for interrupting, is that 8,000 B.C. or 8,000 years ago?

THE WITNESS: 8,000 B.C.

Q (MR. FREEMAN) Now, what was that phrase you used, Archaic, Early Archaic?

A (Witness nodding affirmatively.)

Q Earlier you used the phrase Paleo-Indian.

A Yes.

Q What is the difference between those two descriptive terms?

A Well, that's something I suppose I could expound on for the rest of the day, but

Q If you could do it in five minutes or less, that would be helpful. I just want to make sure I understand your vocabulary.

A Basically it would be this: The Paleo-Indian Period cultures are to be identified with the earliest inhabitants of the State. Given the retreat of glacial ice changes in the post-glacial forest, the fauna and so forth which subsequently occurs, there were re-adaptations in Indian cultures. The earliest of those we refer to as Early Archaic. The Archaic Period goes from about 8,000 to 1,000 B.C., so we're talking about the early part of that Period.

Q What can you tell us about the people who were in the upper two-thirds of our State in the period of 8,000 to 1,000, based upon your research? Have you drawn any conclusions as to what sort of people they were?

A Again, you're referring more to life way or what?

Q Well, what did they -- Perhaps maybe the question is too general. Can you tell us something about the diet of these people?

A Not 'til towards the very end of this period. We can only

speculate on the early portions of the Period, and we can speculate that these are basically hunting and gathering people, and by that I'm using a very generic kind of a term. We have few details on the specific kinds of food that these peoples were concerned with.

Q What kind of population groups does your research indicate we were dealing with? Were these very large groups, clans of some kind, or were they small family groups. Have you drawn any conclusions on that?

A Very small groups until the very end of the Period and at about roughly 2,000 B.C. we began to see sizeable sites appearing, which we infer indicates sizeable groupings.

Q What would be the range for a sizeable group?

A You mean in terms of absolute numbers of people?

Q Oh, just a range. I'm not trying to hold you to specifics.

A A couple hundred, something like that.

Q So you find very, very tiny groups, and then as time goes on, perhaps they become more efficient at doing things, and larger groups, up to a couple of hundred, begin to appear?

A Well, it's not, unfortunately, quite that simple, because not only is there some trend through time, but also there is a very pronounced seasonal change in population size in this area, so that the size of people residing in

face to face situations changes over seasons.

Q Why would that be true, do you know?

A A simple matter of carrying capacity, namely, that the land only produces so much food, and since that fluctuates by season, only so many people can therefore be supported by so much territory.

Q Would that have been a defined kind of a territory?

A In what sense?

Q It's my impression that certain biological species stake out the territory which is theirs. Is that the sort of thing these people would have done?

A No, it's not.

Q Was there an indication that they stayed year-round at a single site?

A No, there is none.

Q So when you find one of these sites, this may have been a site that these people only used certain weeks or certain months out of the year?

A Yes.

Q Was there an indication that their life style had a repetitive pattern to it? Did they go back to certain sites year after year?

A Yes, a strong indication of this.

Q Would that be an indication that there was something there that attracted them back?

A Yes.

Q And would that something have been food?

A Ah . . . Presumably, this would be one of the important elements of that, yes.

Q Are there any other significant elements, other than food, to where the people went?

A I would suppose there were other significant elements; how significant is difficult to say. For example, shelter, I suppose, during seasons, would have been important. I suppose the need to escape from insects would have been important some seasons in the country.

Q Based upon your research, about how many of these groups of 200 or so roamed our State in the area of roughly 1,000 B.C.?

A . . . I have no idea.

Q Can you give me a range, or is that impossible to answer?

A I would be unwilling to, at this point, simply because I don't think that any answer I could give off the top of my head would be at all accurate. I think maybe I could sit down and figure something out, but . . .

Q Can you tell me roughly how many sites have been identified where such groups encamped, of the upper two-thirds of our State?

A Of which?

Q And roughly, the area of over a thousand or so B.C.

A How many sites were occupied at that time in that area?

Q (Nodding affirmatively.)

A I could give you a rough estimate.

Q I'll take that.

A Thirty.

Q Some of these sites could be duplicate sites, could they not, the same people used one or more of those 30 sites during a given year?

A There's no way to know.

Q Were there any startling or significant differences between what you found at various sites?

A Of what period?

Q Well, of the sites you have examined. Do you see a significant change in one or more of the sites from the kind of things you would have expected to find, based upon the other sites?

A Well . . . I'm excited about most everything I find in those sites. I am startled by very small changes on pottery that might occur, and I'm sure that most people wouldn't consider that to be startling. So, if you could maybe describe in more detail what kind of changes you're referring to, I could answer it better.

Q I'm primarily trying to, and I understand how general these questions are, but you have to understand that I have no expertise in your area.

A Yes.

Q If it's a bad question, just tell me, but I'm trying to see if this is a static people, a people that exist for many thousands of years with no significant changes in their life style; whether your research indicates that something was going on, a change, a significant development, something like that. Is that a more specific question?

A Yes. In terms of an evolutionary process, I would say yes --

Q Right.

A -- that there are significant changes that take place through time. These are generally gradual, so that while one doesn't notice remarkable differences, say, between sites, when one looks at the total range of cultural expression over a long period of time, yes, there are some interesting things.

Q Could you, in general terms, tell us the significant changes from the rough period of 8,000 B.C. to a rough period of 1,000 B.C.? Are there any?

MR. GREENE: Do you understand what Mr. Freeman is referring to when he is talking about these changes? I don't understand what kind of changes we're talking about.

MR. FREEMAN: I thought that the witness gave a very nice explanation of it. I'm asking him for

the kind of changes he's described, and if there weren't any in that period, I'll take the answer of no.

MR. GREENE: Do you understand what is meant by the term "changes"?

THE WITNESS: Well, in a very vague way, yes.

MR. GREENE: If you don't --

MR. FREEMAN: That's a very good question.

MR. GREENE: - ask that it be explained.

THE WITNESS: All right, would you?

Q (MR. FREEMAN) No. I'll get back --

A Okay.

Q I think the problem is, and let me just say for the record, there seems to be an assumption I'm trying to trap you or ask you a trick question. I'm not. I'm trying to understand the early history as you perceive it.

MR. GREENE: Let me explain for the record, I didn't think you were trying to trap the witness. I didn't understand your question, and I was wondering if the witness understood the question.

Q (MR. FREEMAN) Can you describe to us, in general terms, the life style of the people that inhabited Michigan in, roughly, 1,000 B.C., the people that inhabited the upper two-thirds of our State during that rough period? Were they, for example, nomadic peoples? Were they

agricultural people? That's the kind of general answer I am looking for.

A (No response.)

Q If you don't know or can't answer the question, just say so.

A Well, I would have a great deal of difficulty answering the question. I was trying to think of what we knew about that problem and --

Q What's the earliest historic period where you think you could describe the life style of the people with some confidence, based upon your own research? How far can you go?

A By historic --?

Q Prehistoric.

A Prehistoric? Right?

Q Right. How far back can you go based on your research?

A I would say go all the way back, with some degree of reliability, but I would say back at least to about 800 A.D. with a high degree of reliability.

Q How many sites, approximately, have you discovered in the upper two-thirds of Michigan dating from 800 A.D. or so?

A Post-800 A.D.?

Q Post-800 A.D.

A Well, again, a ballpark figure, several hundreds of sites.

Q Have you personally examined all of these sites?

A No, I have not.

Q About how many of these have you personally looked at?

A Half to two-thirds.

Q Roughly, 75 or so?

A More, I would say.

Q A hundred?

A A hundred.

Q What's the rough geographical range of those hundred or so sites? Does it encompass the entire upper two-thirds or are there areas you didn't find any?

A There are no areas where none are found, but in the broadest geographical sense, of course, there are some areas where there are higher concentrations of sites than others.

Q What would be the areas of highest concentration?

A Shorelines.

Q Shorelines?

A Of the Great Lakes.

Q All the Lakes?

A All the Lakes. Well, there are higher concentrations in the southern part of the area we're talking about, namely, the northern two-thirds of the State.

Q Let's make sure --

A Okay.

Q The lower part?

A The Lake Michigan, northern Lake Michigan Basin, and the eastern portion of the Superior Basin, and the extreme northwestern portion of the Huron Basin, would have the highest concentration of sites.

Q Do these sites from 800, that approach the 800 A.D. period, appear to have been the sites of a single people in terms of language, life style, religion, or were they different peoples?

A They bear some general similarities.

Q What would the similarities be?

A Similarities in style of pottery decoration, for example, house forms, settlement and subsistence patterns, for example; and it's commonly assumed that these are sites of speakers of the Algonquian language.

Q The Algonquian language was the language -- well, let me make that a more specific question:

Where else, in terms of geographic area, do we find evidences of speakers of the Algonquian language? Where were these people besides Michigan?

A In northern Canada through the western Great -- or, yeah, through the western Great Lakes, down into the Illinois River Valley, on the plains peripheries and then through central Ohio and across the Atlantic Seaboard.

Q The Algonquians were a distinct group, were they not, from the Chippewa?

A No.

Q You consider Chippewa to have been Algonquian?

A They have speakers of the Algonquian language.

Q Would you relate, then, these sites from 800 A.D. to the Chippewa?

A I would say it's in the same cultural tradition.

Q And these people, then, evolved into the Chippewa?

A That would be my assumption.

Q What happened to other Indian groups; they just did not come into Michigan?

A Such as?

Q Well, historically, getting into a more modern period, jumping forward a moment, as white settlements began on the Atlantic seacoast, we know historically, do we not, that some of the Indians moved out, tried to stay ahead of the white man?

A Stay ahead of the Iroquois, primarily, who --

Q Those Indians who were staying ahead of the Iroquois, did they come into Michigan?

A Yes.

Q And what happened to them?

A A lot of them stayed.

Q Are they a distinct group from the Algonquian-type Chippewas that were here in 800 A.D.?

A Well, now, wait a minute. That's not quite how I answered

the question.

Q Well, use your vocabulary. I don't want to put words in your mouth.

A Okay. To restate the answer that I gave you when you asked me whether I could identify this material going back to 800 A.D. as Chippewa, what I said was that it's in the same cultural tradition. That doesn't mean that it was indeed Chippewa. I'm saying that there is broad similarities. Could well be that material may reflect origins of other Algonquian groups.

Q I see. Can you give me the range in terms of centuries or decades, where you, with competence, could identify a group that you would specifically identify as Chippewa in Michigan? How far back would we go to find that group?

A Well, I would say with certainty, no earlier than the period of historic records.

Q Within that period, can you sort of fix it for me by century?

A Well, the middle -- the middle part of the 17th century.

Q Seventeenth?

A 1650 on.

Q And the group, the groups who were in Michigan, from 800 A.D. through 1650, you would characterize as perhaps culturally related, but not necessarily this specific Chippewa group. Do I understand you correctly?

A And not necessarily the Chippewa group, but not necessarily not the Chippewa group, either. It would be accurate to say that it is not known.

Q Do you know of any identification from a prehistorical site or historical site out of Michigan, of the Chippewa group, earlier than 1650?

A No.

Q What is it in the period of 1650 forward that characterizes a specific group as being Chippewa? Is it simply the name or is there something more to it?

A Well, it's an invention of Europeans.

Q They simply assigned a name to the group?

A Pretty much.

Q Did the group have a name for itself? Did they think of themselves as one people?

A They recognized similarity of language, dialect, common cultural traditions, but the earliest period it probably did not go much beyond that.

Q Is there sufficient historical or prehistorical evidence available to draw any conclusions as to the rough population of the upper two-thirds of Michigan between the area of 800 A.D. and 1650?

A As I recall, the estimates that have been made by O. T. Mason and others, of the aboriginal populations densities in the upper Great Lakes, put the population at

the time of the historic contact at something around 15,000 individuals. It would be my estimate that at least half of those people lived in the southern one-third of the State.

Q Now, you just used the phrase, period of historical contact. What do you mean by that?

MR. STEKETEE: Point of historical contact.

Q (MR. FREEMAN) Point of historical contact, excuse me.

A I meant when there is actually census data available, written census data.

Q Would that be Indian data?

A No, no.

Q Settler data?

A (Nodding affirmatively.) Principally the French records of the French military men who were interested to know what the warrior strength of the various Indian tribes was.

Q Now, the 7,000 or so in the upper two-thirds would not have been a warrior count, would it?

A No. Those are figures generated from such things as warrior counts, say, for every male there are so many women and children.

Q And old people?

A Correct.

Q Going back to 800 A.D., did you find something like

caribou bones in the sites from that period?

A We have sites of that period that have a great many bone remains.

Q Were you able to identify those bones?

A Yes.

Q What did you conclude they were?

A Well, there's a wide variety of species that were used by these people, predominantly, however, they're fish.

Q Now, what is the earliest site you found fish in?

A . . . Well, if memory serves me correctly, it would be a site of the late Archaic Age somewhere around 2,000 to 1,000 B.C.

Q And where was that site?

A Again, if memory serves me correctly, it was Menominee County, Michigan.

Q What sort of site was that?

A Burial site.

Q And did you personally locate it?

A No.

Q How did you happen to be examining that site?

A Ah . . . The report I refer to is in the literature.

Q I didn't understand that. You mean you didn't personally --

A I didn't personally identify this particular dig. This is something I read about.

Q You didn't go there, okay? I understand you now. What

would be the earliest one with remains of fish that you have personally visited and examined?

A About eight -- 800 A.D.

Q Where was that site located?

A Bois Blanc Island in the Straits of Mackinac.

Q What sort of a site was that?

A What we call Late Woodland Village. It was a site occupied repeatedly between about 800 A.D. and about 1350, by radiocarbon date.

Q Now, when you say repeatedly, do you mean that it was occupied during a portion of the year for many successive years?

A Yes.

Q Was there evidence of which season or which months there was occupation?

A Yes.

Q What sort of evidence was it?

A Evidence from plant remains, namely various fruits and nuts that were in season at various times of the year that were found in abundance there; evidence from various migratory waterfowl; indication from the antler condition of deer antlers attached to the skull or not attached to the skull.

Q What conclusion did you draw?

A The conclusion that was drawn was that this was a site

that was occupied from sometime in the spring through the very late fall.

Q Was there any evidence of the size of the group that occupied that site?

A There were estimations made but the size of the group apparently also fluctuated through time, so that we could perhaps say again a rough figure maybe 200, maybe 500, maybe 50, but somewhere in there.

Q Was there any evidence of where these people went during the fall and winter?

A What kind of evidence?

Q Well, was there any evidence that you were prepared to draw conclusions from?

A There's evidence by analogy, yes.

Q I don't think I understand that answer. By analogy to what?

A Well, the settlement pattern of that area is wellknown and agreed on by most authorities that have thought about it. Repeatedly, in the historic literature, we find that Indians came together during the warmer seasons of the year; that there were large lakeside villages that, as food became scarce and the onset of winter and so forth, people were forced to break up into small family groups and that they went into the interior in the small groups in order to hunt. You can probably refer to the report

of Alexander Henry's sojourn with the Wawa^{um} (sp) family in 1763 as a case in point.

Q Was there any indication at the site whether these people moved north or south --

A No.

Q -- in fall or winter?

Now, you said there was an indication of fish at the site. What kind of evidence was that?

A Bone remains --

Q Where did you find --

A -- scales.

Q -- those?

A Where? The occupation refuse on the floor of houses, refuse pits, fire pits, scattered everywhere, and occasional instances of strata deposits up to three or four inches thick of solid fish bone.

Q Finding them in the fire pits would indicate that they were cooking fish, is that right?

A Not necessarily. There was a lot of cases where a fire pit would be left open after it was used and the site abandoned, and they would be blown in, or in some other manner come to lodge in there in a secondary way, but it could.

Q Can you characterize for us how much you found by way of fish bones, pounds or feet or something?

A. No. I couldn't offhand. Those figures do exist in terms of bones per square foot of soil or some measure I don't quite remember, but it is published in my paper on Paleo Ecology and Ethnozoology in the Upper Great Lakes, and in a discussion of the Juntunen Site. I could simply say that there was a lot of bone, tremendous quantity of bone.

Q Of fish bone?

A. Yes.

Q Was there a quantity of animal bones?

A. Yes, a smaller quantity of animal, bird, mammal, bird, turtle, so forth, so on, bone, yes.

Q When you say a smaller quantity of bone, there would be much more meat, would there not, from a single deer than from a single fish? Are you doing a comparison that way, or are we just talking about the number of bones?

A. No. We're talking about the pounds of useable meat that would have been generated from the number of individuals of all species that were identified there.

Q These people, then, went to an island in the spring and maintained a substantial portion of their diet from fish, supplementing it with game, is that a fair conclusion?

A. Yes, sir.

Q Would that presumably suggest the reason they selected an island for their encampment?

A Presumably, yes.

Q How far is that island from the mainland, roughly?

A . . . Three, four miles, maybe not that far, less.

Q Did you find the remains at that site of the gear they used to take fish or deer?

A Ah . . . Very little in that regard.

Q How do you evaluate a site like that? Is there a specific criteria, or did you just go out with your shovel and see what you can find?

MR. GREENE: I'm afraid I'm going to object to that. I don't understand what you mean by evaluate.

Q (MR. FREEMAN) Do you understand what I mean?

A Maybe if you could restate it.

Q What do you do when you go to a site? Why are you there?

A You mean in general terms or how do you proceed specifically or what?

Q This specific site, why did you go there?

A Generally to solve some kind of a research problem.

Q Is there a specific technique you use?

A It depends on the problem. There's generally a sampling technique of some kind that is used.

Q What was the sampling technique used in regard to this site?

A Well, a number of ten by ten foot excavation units were dug into the site, each one being dug down through the

cultural deposit to ~~serial~~^{sterile} ground until they would no longer produce any cultural material, and these excavation units were spread about in such a way in order to obtain some percentage sample of the site.

Q You attempt to obtain a statistically valid sample? How do you do that?

A By using a random sampling procedure.

Q Can you tell us the specific procedure you employed at this site?

A I didn't dig this site. I just worked on the material that came from it.

Q Is there a site in Michigan where you made the decision on what would be statistically valid in terms of how many sites to dig?

A Well, in league with other people, yes.

Q Where was one of the ones you made the decision?

A The O'Neill Site, the Pine River Channel Site; several survey sites that we have done projects --

Q Let's take the O'Neill Site. What was that?

A It's a site near Charlevoix.

Q What kind of a site was it?

A Late Woodland Site.

Q Was it a village?

A Yes.

Q How did you decide how many specific points to begin to

remove earth from?

A Well, first, through some testing method, one determines the geographic extent of the site, just how big it is.

Q How did you do that?

A By simply shovel-testing to see where material occurs. Then the site is graded off into ten by ten foot squares. Those are numbered. Then one determines, given the amount of time and money available and the particular research problem that one wants to work with, what size of sample is necessary, and then that number of sites is drawn by some random method table of random numbers, and those particular excavation units are excavated.

Q How many excavation units did you actually dig on this site?

A I don't recall.

Q Was it less than half of the total potential site?

A Oh, yes, yes.

Q And you selected them, if I understand you correctly, basically by lottery, just pulling numbers --

A From a table of random numbers, yes.

Q Is that the general way of approaching these types of situations?

A Yes.

Q Of the sites you examined in Michigan, have there been any where the entire site was excavated?

A Yes.

Q How many sites were there where you went total excavation?

A I can only think of one.

Q Where was that?

A Pine River Channel Site at Charlevoix.

Q What sort of findings did you make there? What sort of things would you find?

A Same kind of things I have already described as typical of Late Woodland sites.

Q Tell us what the basis of the decision was, then, to excavate that entire site.

A Yes. They were going to build a condominium on top of it.

Q You were trying to get out whatever was --

A Right.

Q -- worth getting?

How many burial sites have you had occasion to examine in the upper two-thirds of Michigan?

A Now, you're referring to Historic/Prehistoric, personally, or -- I actually participated in?

Q Where were you where they were doing something?

A The Prehistoric sites?

Q If you can answer it in terms of Prehistoric or Historic . . . If you can't, just a rough number of how many you have been on site at?

A No Prehistoric sites; one Historic site.

Q Where was that?

A The Historic site?

Q Yeah.

A The Lasanen Site at St. Ignace.

Q What did you find at that site?

A A number of Indian graves dating from the 1690's.

Q Was this what we would call a cemetery?

A If by that you mean a place where there are dead bodies, yeah.

Q I meant in some kind of an order. Was there a plan to put bodies there?

A Yes, but the form of burial was not quite the same because a lot of individuals were buried together, and also it was only bundles of bones that were buried, not flesh bodies.

Q What kind of things did you find at that site besides the bundles of bones? Anything?

A Yes, artifacts which reflected both Indian and European manufacture.

Q What kind of artifacts, weapons?

A Weapons, decorative articles, beads, glass beads, bone projectiles, iron projectiles, iron knives, harpoons, brass kettles, gun parts, rings.

Q How did you date the site?

A Well, it was a situation again of a house being built on top of burial grounds, and it was a salvage situation where we wanted to recover as much of this material as possible before it was destroyed, so we simply located and excavated the grave area, most of which had been disturbed by the footings for the foundation.

Q Well, you indicated that it was roughly from 1690. How did you conclude that that was the period involved?

A By the type of artifacts that were recovered, particularly the European artifacts, which we knew to be French. We knew from the historic documents that there was a French fort and mission located at that point up until 1705, I believe. We had a large collection of French material from Fort Michilimackinac from across the Straits which dated, at the earliest, 1715. We knew that these materials were unlike those. They were, however, very much like sites from the Iroquoisan country in northern New York and also Huron sites located in Ontario, which were occupied after 1650 and before 1700, so we assumed, on the basis of a logical comparison of those artifacts, that the site dated from the last decade of that century.

Q And then the indication was, if I correctly understand you, that this was not a Chippewa site.

A No, that's correct.

Q Would these have been Indians who had been converted to

Christianity and lived near the mission. Is that the reason the burial site would have been close to an old church?

A We have no way to know, from archaeological evidence, whether they converted to Christianity or not.

Q There were no rosaries or crosses?

A Oh, yes.

Q There were?

A In great abundance, but that doesn't necessarily mean that they were Christians.

Q I understand you can't go back and ask them.

A Right.

Q What happens to the things removed from that site?

A The things that were removed from that site, after they were studied and photographed and so forth, they were returned to the landowner who had a legal claim on them, and I understand they are now in a bank vault in Sault Ste. Marie.

Q How about the bones?

A The bones are at Michigan State.

Q When you say the landowner had a legal claim, are you an attorney?

A (No response.)

Q I'm not trying to hassle you. I just want to make sure I understand all the things that are going on here.

Somebody told you the landowner had a claim?

A. Yes. That would be more accurate.

Q Can you tell us who that somebody was?

A. . . . No, I really can't, but it's -- let me say that the general assumption among those in the profession of archaeology is, according to our meagre understanding of the law, that if materials come from sites that are on State-owned property, they are, by Act of the Legislature, the property of the people of the State; if they're from Federal land, they're the property of the Federal Government, and if they come from private property, they're the property of the private landholder. And generally we ask the landowner to donate those to the institution for which we work.

Q This landowner was a hardhead?

A To put it mildly.

MR. STEKETEE: Do they get a tax deduction for that, for the donation?

THE WITNESS: A tax deduction if they?

MR. STEKETEE: Donate the materials?

THE WITNESS: I have known it to happen.

Q (MR. FREEMAN) Well, this assumption among your professional peers that a landowner owns artifacts, can you tell me where you first heard that?

A Well, as long as I've been in archaeology, whether it's

been in this State or other states, that has been the assumption. No, I don't -- I suppose that was one of the truths that somehow got into my skull and I can't tell you where it came from.

Q How about the bones going back to the institution, is that based upon a legal opinion, or is that another tradition of your profession?

A It's a tradition.

Q And they are then what, studied by graduate students?

A No, I wouldn't put it that way. If you want me to address this particular instance, these bones were studied by a physical anthropologist, Terry Phenice, at the ~~University of Michigan~~ ^{State University}, who then directed a graduate student in the study of these, and they will be used for a Master's Degree, but they aren't just turned over to a Graduate Assistant.

Q I didn't mean to imply that. I'm just trying to follow through.

(Whereupon, there was a brief recess.)

Q (MR. FREEMAN) Professor Cleland, can you identify for me the specific Indian cultures that were in Michigan at various periods? You are the author, are you not, of this report entitled Report, United State of America vs. State of Michigan?

A Yes.

Q You have several references in the report to cultures of the period. What, generally, were the cultures in early Michigan?

A Well, there were three primary named cultural groups during the Historic period, although there were others that came and went. They are primarily the Potawatomi, the Ottawa and Chippewa or Ojibwa.

Q Is that for the Prehistoric period also, those three identifiable groups?

A We have no way to know.

Q Were there, in any of the sites you examined, written records left by the Indians?

A No.

Q Is there any indication that these early Indian groups had some kinds of a written language, hydrographic or whatever?

A They had a non-literate tradition.

Q A non-literate tradition?

A Their histories were -- were passed word of mouth and not in a written form.

Q Was there not, for example, a -- I seem to recall seeing, at some museum, a decorated buffalo robe with figures on it that was the history of a particular people.

A No.

Q The Michigan Indians didn't do that sort of thing?

A Not to my knowledge, no, sir.

Q Is there something that was specific to the Chippewa that other Indian groups did not have, by way of a particular type of weapon, particular type of identification, particular way of burial?

A . . . I'm not sure I can really answer that. It's such a broad question.

Q Then if you went to a given Indian site, let's go back to the example you have used several times, someone is about to build a condominium and word reaches you that there are Indian artifacts being discovered in the digging of a basement, would you expect, based upon the experience you have had with Michigan sites, that you would be able to specifically identify such a site as to which Indian group was there or had used that site?

A If it's a Prehistoric site, no, this is impossible. No one could do that.

Q Have you found some indication of what happened to those early peoples? Did any of them become extinct or leave the State? Is there any evidence of that?

A No, they simply changed.

Q Or left?

A Well . . .

Q If that's not correct, if they didn't leave, say so.

A Well, I mean, you know, they might have gone to Chicago

to visit their relatives, but they certainly, you know, didn't move out lock, stock and barrel, if that's what you're suggesting.

Q Is there evidence of these Historic sites of Indian populations coming in, immigrants?

A There is occasionally some evidence of contact with people from other areas, yes.

Q Is there evidence of a large group, large Indian group coming into Michigan?

A At some points in prehistory, there are, yes, at one, specifically.

Q Which point is that?

A It's the period between about 3,000, or 300 B.C. and about 400 A.D., there's evidence of people entering southwestern Michigan from the Illinois River Valley.

Q During the historical period, is there any evidence of large Indian groups coming into Michigan?

A Yes.

Q When was that?

A Hmm . . . It would be the evidence we have for the Huron and Ottawa coming into Michigan after they were expelled from Ontario in 1649 by the Iroquois.

Q Were they being driven ahead of the Iroquois? Is that a successive pressure series of ripples?

A It's over a few years, but the main push took place in

1649, the winter of 1649.

Q Did you find any historical evidence of the Sioux having come into the Michigan area?

A No.

Q Are you familiar with findings of the Sioux outside of Michigan?

A No.

Q What were the Hopewell Indians?

A These were people of what we call the Middle Woodland Period. They preceded in time those people we were talking about earlier. They occupied the southern portions of the State only, and they did so between 300 B.C. and 400 A.D.

Q Is there an indication of what happened to them, from your findings?

A Well, they became Late Woodland Indians.

Q They just culturally evolved?

A Right, right.

Q Can you tell me, Dr. Cleland, what are the characteristics of the Late Woodland Indians?

A Village agriculturalists in the southern part of the State, people that, in general terms, raised corn, beans and squash for a living, hunted with a bow and arrow, lived in rather large semi-permanent villages. This is, again, in the southern part of the State.

Q How about in the northern part?

A In the northern part of the State, these would be lakeshore villagers, primarily living, again, in fairly sizeable semi-permanent types of situations. They were people who manufactured pottery, hunted with a bow and arrow, and made their living primarily by fishing.

Q Now, when you say lakeshore, are you referring to the Great Lakes?

A Yes.

Q Was there evidence of these people living on the shores of inland lakes?

A Occasionally, yes.

Q What kind of habitation were these, year-round or less than year-round?

A Less than year-round.

Q Have you found enough sites of a specific people to have an opinion as to how many places of encampment or such sites that a given group might have?

A On occasion, yes.

Q What kind of conclusions did you draw?

A Well, I suppose that I could best answer by example: In the period between 800 A.D. and approximately 1200 A.D., in the northern part of the State, there is a cultural manifestation which archaeologists call the Mackinac Phase. This is marked by certain modes of ceramic

decoration, primarily. The Mackinac Phase and the style of pottery, which we assume to be, since it is a plastic form of decoration, reflects stylistic influences which may come from a rather broad area or may be specific to a particular individual, and we see that in this particular phase, for example, that the pottery bears generic resemblances to pottery that is made all over Michigan; in fact, all over the upper Great Lakes area, leading us to believe that there is, over this broad area, some cultural similarities. However, then, there are a set of specific similarities again, and I'm confining these primarily to decorative motifs which appear on pottery in that, say, in the northern portion of the Lower Peninsula. We can name these sites as if they were modern towns and would assume that any Indian of this type would have known where those towns were, how big they were; would be able to get from one to the other with relative ease, and there may be a dozen or 15 towns in this tight clustering.

Q Have you found any evidence that individual Indians did, in fact, go from one to the other?

A No.

Q Is there evidence of the kinds of social system that Indians had?

A Yes, there is. There is some.

Q What sort of evidence is it?

A Well . . . there's some assumptions about, again for example, the ways in which certain, say, styles of pottery decoration are linked with certain kinds of patterns of social residence and marriage. For example, we know that women make pottery. We know this from ethnographic -- the descriptions that we have in historic times of Indian pottery manufactured in the east exclusively describe this as being a job that is done by women. We assume that, therefore, that this held true during the Prehistoric Period. Given that that is true, and given that girls learn to make pottery and decorate pottery from their mothers, if there is a residential pattern, social pattern that keeps women together like in a matrilineal system, there ought to be, therefore, a great deal of homogeneity in the styles that you see used in decoration of pottery. However, if there is a patrilineal system in which women are coming into a residential group from outside, then the styles should be quite various, reflecting the fact that women that are marrying into that group learn to make pottery in a lot of different places, and that's roughly how the theory goes.

Q Which did you find in the Michigan sites?

A Both. In the Late Woodland of the Northern part of the State, there seems to be indication that there is a

matrilineal intrusion at some time around 1300 A.D.

Otherwise, it seems to be a patrilineal, patrilocal kind of social system that is in operation.

Q Wouldn't that seem to indicate that during the early period, that there may not have been that great a movement of men, but that women as slaves or purchased brides or whatever, were moving from Indian settlement to settlement?

A Well . . . that's stating it fairly crudely.

Q Well, use your vocabulary. I just, as I say, I don't want to put words in your mouth. I just want to make sure I understand you.

A Let's say that there is evidence that the social and political bonds between people may have cemented, being cemented by marriage bonds, created friends and allies from people who were formerly just neighbors.

Q Based upon that, it would be difficult, would it not, to tell from the artifacts in a particular site, whether something that appeared different had been brought in by a wife from another group or was the product of trade, am I right?

A Well, archaeology generally doesn't deal in exceptions; it deals in sort of the broad generalities that one can grasp on to interpret the --

Q Hm-hmm.

A -- ideally the norm. There is no way to know if you find a pot in a site that is not like every other pot in the site, whether it got to that site by the fact that it was traded or that it was carried by a wife, if that is what your question was.

Q Yeah. Let me try the question again, just to make sure you and I understand what I'm asking you: You described for us the burial site that you had examined, found some European implements there. We have to presume that those European implements were not manufactured by the Indians, I would assume.

A That's correct.

Q You cannot state with precision, though, whether they were traded, stolen, whatever? We just know that they came from some outside group, am I right?

A Well, it depends on the context. If you have just the strict archaeological data to work with, you're correct. However, we have more than that. We have --

Q Right. That's when we get to the written records.

A Yes, and in this case we do have written records so we know better.

Q Going back to the period before there were written records --

A Yes.

Q -- am I correct that it would not be possible to determine the extent, if any, of trade between the various

Indian groups, trade and commerce?

A No, you're not correct in putting it that way because if there was a large volume of trade, this could be detected.

Q Did you detect it?

A No, because there isn't very much.

Q Okay.

A There is very little evidence of trade.

Q So the basic evidence, then, focusing on trade for a moment as a specific category, focusing on trade, the basic evidence of trade, if I correctly understand you, lies in the records of the settlers' society, the historic documents which have survived from 1650 forward.

A No.

Q No? Okay. Why am I wrong?

A Because if there was trade, this could be -- If there was substantial trade in particular kinds of material items that are preserved in the sites, this could be very well detected using strictly archaeological methodology, so I guess our confusion is that because I'm saying there is no evidence, you seem to be confusing that with saying that you can't detect it.

Q Okay. I understand your distinction.

A Okay.

Q If it had been there, you would have detected it?

A Right.

Q In this particular case, you looked and didn't detect it.

A Right, right.

Q Okay. I understand. Then speaking, starting off with the premise that you attempted to detect and were unable to do so, would it be fair to say that in attempting to evaluate trade and commerce by the Chippewa and the Ottawa in Michigan, our best available source, in light of there being no archaeological findings, our best available evidence would be the historic records of the white traders to the extent that they are still available.

A (Shaking head negatively.)

Q I'm still wondering -- I can tell by the way you're shaking your head, -- try and put it in your vocabulary.

A I would rather have you put it in yours because I'm still not sure -- I'm still not sure what now the question is that you're really driving at.

Q The question, and there will be a number of similar questions --

A Okay.

Q -- the bottom line question is: If we are seeking truth in a particular area --

A Yeah.

Q -- or to the best extent we can find truth, what is the best source to go to? And I'm asking you in terms of trade and commerce, in view of your having looked and

failed to find evidence of early Indian commerce, if, in your opinion, there would be a better source to go to than the historical records of the white traders?

A (No response.)

Q Is there another way to do it?

A Maybe I could answer it like this: Historic records are very good sources of information on some aspects of trade and commerce. Archaeological information is also very good, a good body of data to use to investigate that problem.

Q Um-hmm. But in this specific case, what would we do?

A Well, in this specific case -- you can't generalize to this specific case since some sites that were occupied by the Ojibwa are mentioned in the records so that we know they were occupied by Ojibwa, but nothing further. The records are otherwise silent, so if we are looking for some information on trade, even though it's the historic period, even though it's Ojibwa, the only thing we have to work with is the archaeological data. There are other problems, I would imagine, where the reverse would be true.

Q Okay. I think I've got you. Let me try it again: If I were to ask you specific questions about the trade patterns, the commerce, actions --

A Yes.

Q -- of the Chippewa and Ottawa Indians within the general geographic area of the upper two-thirds of the State of Michigan during any period where you had either archaeological findings or written records upon which you were willing to put confidence which would be relevant to the question of trade and commerce --

A Um-hmm.

Q -- would you be able to identify for me any source other than the records of the white traders?

A Oh, yes.

Q Such as?

A Well, such as material from archaeological sites.

Q But I thought we had agreed there weren't any findings that were relevant? I guess that's where my confusion is coming in.

A Maybe if we approached it this way, and if you're interested in specific items, maybe if you asked me about those, then I could try to either cite historic or archaeological information that I might know on that particular problem, because I would suspect that in most cases we would have both. If we were talking about catlinite (sp) pipes, or we are talking about iron awls or other items, we'll be talking about a number of different sites. We'll be talking about some with good archaeological records, others with scant archaeological records. We'll

be talking about some sites that have very good documentation and others that have relatively few written records. So it's hard to answer in general, but --

Q Well, can you give me an example of a site you have examined where, from the archaeological materials available at that site, you concluded that the group that had formerly occupied that site was engaged in trade and commerce with other Indian groups?

A Yeah.

Q Which site would that be?

A Well, I could name several sites. Let's take the -- Do you want a site that I have personally done, or that I know of from the literature?

Q I prefer ones you are personally familiar with.

A Well, again, I refer, then, to the Lasanen Site at St. Ignace.

Q You had better spell it for the Reporter.

A L-a-s-a-n-e-n, or Gros Cap, G-r-o-s C-a-p, two words, Site at St. Ignace, two sites of historic content both occupied before 1700, certainly both within the last quarter of that century.

Q Um-hum. What did you find at those sites?

A Well, these sites both contain a variety of materials that must have been acquired through trade from some distant source. For example, they both contained wampum.

Wampum are shell beads that were widely circulated, presumably functioned in a commercial market economy. However, we don't know that for certain in this case. This stuff was manufactured off the Massachusetts coast by Indians and by Europeans and got into the trade.

Q How much wampum did you find?

A . . . I suppose hundreds of thousands of little beads of it, but presumably maybe four or five belts originally.

Q That's what I was getting at. They are woven into belts?

A Right.

Q You found how many belts?

A Four or five.

Q Four or five. And were they all at the same place in the site, all from the same ten by ten?

A No, from different ones.

Q Was there any evidence from which you could draw conclusions as to whether a single individual on whatever mission might have brought these belts of wampum back to that site, or whether --

A No, we could only say where they ended up.

Q The various points they were at, did they seem to have been the remains of habitation or some other kinds of --

A Some burial sites.

Q Burial sites.

A In those days you could take it with you, apparently.

Q But only some of the burial sites?

A Yes, only the women, which was also very instructive.

Q Only the women could take it with them, I see.

MR. STEKETEE: Maybe they had more need of it.

Q (MR. FREEMAN) Well, it kind of represented a dowry of some kind? Did you find any evidence of that?

A No idea.

Q You just don't know?

A I don't know.

Q But you did identify the sex through the bones?

A Yes.

Q What other kinds of materials did you find that would indicate trade?

A Catlinite pipes and calanite animal effigies that were cut out of pipestone from Minnesota.

Q I hate to tell you this, but -- I know that you're beginning to think I'm a dunce. Catlinite, what is it?

A It's a red stone, a blood red stone that you see Indian pipes made out of many times. It's a very soft stone that occurs out in Minnesota in --

Q I see, so you find --

A -- particular quarries.

Q You find out from geologists where one could have found that?

A Right.

Q And they identify no sites in Michigan, so you conclude that somehow somebody had to bring it in?

A Right.

Q Was any carbon dating done on the pipes?

A No. They cannot be carbon dated. You have to use an organic material.

Q Did it appear that the pipes were from the same general time period as the wampum?

A Yes.

Q And where did the pipes occur?

A Burials.

Q Men or women?

A Men.

Q Men. These might indicate, might they not, gifts?

A Hmm . . . That would be unlikely, since pipes, in these societies, functioned much differently than they do in our own; more magical, religious context, and very personal kinds of an item.

Q Does the evidence indicate whether there was a particular ceremony or father-to-the-son transfer of pipes, or something like that?

A Not to my knowledge.

Q So we can't be sure, then, how the pipes came in?

A You mean specific mechanism? No.

Q Is it possible that a particular person within the tribe was designated for the specific task of going to mine such pipes and bring back an amount of that kind of stone?

A Well, it's conceivable, but it is unlikely since the quarry was located in the Sioux -- in Sioux country, and one person would have likely not made it -- at least back.

Q I would think one would have a better chance than a group. Are you familiar with the great money wheels of the Island of Yap?

A Passingly.

Q But it is your conclusion that the Indians did not get pipes the way the Yap Islanders got their great wheels, sending a small courageous group out to get some for the entire tribal group?

A I really don't have any knowledge about who got the pipes or the material.

Q Was there any other evidence of trade at that site besides the wampum and the pipes?

A Hmm . . . If by trade we're referring to stuff that passed between Indians and French, yes, a great deal of it.

Q That would be easier to identify?

A Yeah, but if you mean more long distance kinds of things, yes, there are shell baubles carved in actually primarily fish forms, effigy forms of fish, made out of shell, and we presume that these were made by Europeans and traded to

the Indians.

Q Now, to what extent, in the sites you examined, did you find physical evidence of the type of boat or canoe that the Indians would have used? Did you actually find any of those?

A Occasionally, but not in the context of sites.

Q Where did you find them?

A Generally, these come from bogs, bottoms of lakes and so forth.

Q You mean they sink and then you find them later?

A Right, yeah.

Q About how many such boats were found from the bottom of the Great Lakes that you know of, a hundred, a thousand?

A I don't know of any.

Q Oh. About how many such boats have been found in Michigan, the upper two-thirds of Michigan?

A Dozens.

Q And is there a common denominator, a type of geographic area where they are most likely to be found or most of them have been found?

A Well, as I've already said, most of them were found under conditions whereby they can be preserved and be away from the air and so forth, under water.

Q Well, is there one general geographic area of the State where most of them have been found, or are they just

scattered around?

A Of the State? Most of them have been found, say, most of them found in the northern portions of the State.

Q Do you have any evidence as to why the boat would have been put into a bog in the first place? Is there some indication from other historic materials, or prehistoric materials?

A (No response.)

Q I'm trying to picture --

A They used them in water and they sink. That would be my --

Q What I'm getting at is -- Let me ask the question a little more directly: From the way these vessels are found --

A Yeah.

Q -- does it appear that the Indians were engaged in fishing in the bogs, in the island lakes, is that what the boats were doing there, or were they just traveling across the lake?

A We have no way of knowing that.

Q There was no substantial findings of gear?

A These are without context of any kind. We don't have any idea where they fit; who made them. We really don't know anything except they are boats.

Q Now, what is the oldest site you're familiar with where fishing gear was collected in the upper two-thirds of

Michigan?

A (No response.)

MR. GREENE: Do you mean personally familiar with, Counsel, or do you --

Q (MR. FREEMAN) Yeah.

A Well, to my recollection, as far as I'm personally involved with it, I think about 800 A.D. Now, wait a minute! That's not correct, either. About 400 A.D.

Q Where was that gear found?

A Wycamp Creek.

Q Where is that?

A In Emmett County.

Q Emmett County? What kind of gear was it?

A Net sinkers.

Q What sort of material were they made out of?

A Rocks, just beach cobbles.

Q How did you know it was a net, then?

A You mean a net sinker?

Q Yeah. I mean, how did you know what purpose it was used for?

A Because the form is rather wellknown. They were observed in Historic times frequently. They have been found at some other sites in eastern North America, tied on to nets. They have been found with such a sinuous relationship in the ground that would indicate they were

tied to cord or nets.

Q These were rocks with holes punched in them?

A No, no. These were rocks that were notched on both sides so that a line could be tied around them.

Q Was the find in proximity to a waterway?

A Real small waterway.

Q Was it a --

A A non-navigable stream.

Q A stream?

A Right.

Q How close to the stream were they?

A Twenty yards.

Q Is that a sufficient factor for you to deduce that they were used as a weir of some kind in that stream?

A Well, they were also found 15 yards from the Great Lakes, so it could -- they could have as well ^{been} used there, and that would be my assumption.

Q How much did they weigh?

A I do not recall, poundage.

Q Well, rough range, 10 pounds, a hundred?

A Oh, no, no. Five.

Q How many of them were there?

A I don't recall.

Q More than 20?

A No.

Q Less than 10?

A Yeah, less than 10.

MR. GREENE: Are we talking about nets or sinkers?

MR. FREEMAN: Sinkers. I don't think he found any nets, did you?

THE WITNESS: Uh-uh.

Q (MR. FREEMAN) We can't be talking about nets. Now, is this a -- these types of sinkers, is this a commonly used device among the Indians that were in Michigan? Do you find it at many sites?

A By "early" (sic) Michigan, you mean what?

Q Oh, let's say anything before 1650?

A Well, we have net sinkers going a long way back into the Prehistoric record, yes.

Q Did we find many many of them in use by many many groups?

A Yes.

(Whereupon, off-the-record discussion.)

(Whereupon, there was the luncheon recess.)

MR. FREEMAN: My co-counsel, Mr. Taylor, is going to ask some questions at this point.

EXAMINATION

BY GREGORY T. TAYLOR, Esq.:

Q Dr. Cleland, when you were testifying this morning, you indicated that when you go to a site, you usually have a

specific research problem in mind that you want to solve, is that correct?

A Yes.

Q Could you give me some examples of the type of research problems you're talking about?

A Well, it would depend upon the data base that's available. For example, if there is an area in which you begin to work where the prehistory is relatively unknown, the first thing, the first order of problems would be simply to establish a chronology: What is the cultural sequence in that area through time; where are the sites located, and so forth. As you begin to learn more about that, as more data from excavations is available, you can work on more sophisticated kinds of problems. For example, what factors of the natural environment condition, the location of settlements; what is the relationship between settlement size, placement and subsistence; what are the cultural relationships between that group and neighboring groups, and so forth.

Q Would it be fair to say, then, that you might start with a very general or broad type of research goal, and then the more information you get, you specify certain problems or areas which you want to attack?

A I'm not sure I would describe it as general or specific, but I think it would be fair to say that the more you

know, the more possibility there is to ask specific kinds of questions. You could still also ask broad questions.

Q Perhaps it would be helpful for me to see how this works. If you could tell me what happened, for example, at the St. Ignace Site which you were directly connected with. Could you give me an idea of what types of things you were looking for at St. Ignace?

A In order to try to explain, to throw light on your last question?

Q Yes.

A Is that the idea? Well, that's not a very good situation. It's not a very good example since that particular situation at St. Ignace was more or less a salvage situation. In other words, we wanted to keep something from being destroyed and, therefore, it wasn't really an example of a problem -- of a problem-oriented type of research.

Q Why don't you give an example, then, from your experience?

A Ah . . . an example would be a project which we have in Michigan State which is called the ^{Traverse} ~~Travellers~~ Corridor Project, which was started approximately ten years ago, involving sites in the northern -- the northwestern quadrant of lower Michigan, particularly that area of the coastal plain between Traverse City and the Straits of Mackinac. Working with a region like this, and going

into an area where there was very little knowledge of the prehistory, only, say, two or three sites were known from that rather large area of the State, and we would begin by designing a testing strategy which would reveal the locations of sites and reveal their extent, so that was the first order of -- of knowledge that we wanted to gain. Then we followed that up by systemically testing the sites in order to try to recover a stratigraphic sequence of pottery and other artifacts so that we could begin to look at the differential distribution of sites over that broad area by time.

Q Let me interrupt you now. The purpose, then, you had a specific purpose for examining the pottery and artifacts, is that correct?

A That's correct.

Q And that specific purpose was what?

A Was to establish the sequence of human occupation by studying the differences and similarities of artifacts recovered from among a great number of sites.

Q Now, in your personal experience, are you familiar with any sites where you have examined the artifacts prehistory with the research goal of determining the extent of a commercial Indian fishery?

A No.

Q Are you familiar with anyone who has had that as a

specific goal?

A No.

Q Okay. What were your instructions when you first became involved in this case? What did the United States instruct you to do?

A Well, I'm not involved by the United States. I'm involved by the two Indian tribes.

Q I'm sorry. I thought you were a witness -- You are not a witness for the United States?

A No, I'm not.

Q What were the instructions of the two Indian tribes?

A In what regard?

Q As to what your involvement in this case would be.

A The subject area of my involvement deals with the ethnozoology of the Indian peoples of the upper Great Lakes.

Q Well, did they indicate to you what type of testimony they hoped you would be able to offer?

A Ah . . . well, on that particular subject.

Q Did they indicate to you what they hoped to prove by your testimony?

A No. I mean, if you're asking -- now, I'm aware of the case. I read it in the newspapers from time to time.

Q Well, I'm not concerned with what you read in the newspapers. I'm more concerned with what the representatives from these two tribes told you as far as

what they wanted to prove by your testimony.

A. Well, they didn't try to tell me to try to prove anything, and if they would, I would have told them I wouldn't do it because I have been studying these problems for a long time before this case ever came into the courts and I intend to be studying it a long time after the case is gone, and this is simply an area where I have a matter of knowledge and curiosity.

Q. Was one of the areas that they wanted you to look at, then, the extent of the Indian commercial fishery?

A. Yes.

Q. Did they ask you to do any original research in this area?

A. Ah . . . They didn't ask me to do research in any specific materials in that area. But, there are an area of the thing, other than in a general way; and what I did was to structure the research so that it filled in my own lack of knowledge about some areas, one of which was the commercial aspects of the fishing.

Q. Okay. I believe Mr. Steketee has a few questions.

EXAMINATION

BY PETER W. STEKETEE, Esq.:

Q. Doctor, you used, in defining the terms Historic and

Prehistoric, you defined the cut-off in terms of the

Historic Period being that in which there are/there is

some documentary evidence --

A. Um-hmm.

Q -- extant.

Is there a particular time or time frame, in the part of Michigan we're talking about, where we shift from Historic -- Prehistoric to Historic?

A Well, that - it's kind of -- kind of a complicated answer is required to that because there are, of course, no written records prior to the time of the French contact because the Indian people are non-literate. However, then the reports that appear and have been preserved are scattered so that there are sites occupied during the contact period or during the literate period where there are no historic records, even though a lot of the materials in them might be European. But, there are no written records that pertain directly to that specific site. Therefore, we could say that this is a Historic site, even though there are no historic records which pertain to it.

Q I understand what you're saying. Now, when does the first French contact, when was that made with the Indians of this area?

A I don't recall specifically, but it's in the middle of the 17th century the French were in Sault Ste. Marie, and sometime, I think, in 1650 or '60, somewhere in there.

Q All right. Now, a number of these questions are fairly general. I'm just trying to educate myself. What is, to

the best of your knowledge, what is the oldest indication of human habitation in the western hemisphere? How far back do the Indians go or the Indians or the people that were here when the white man came?

A It's . . . It's a matter of some argument at this point among authorities. There are those who say that it may be as early as 28,000 years ago, based on some data from, principally, the Andean area of South America. Others think it's much later and rely their conservative judgment on the first good clustering of radiocarbon dates associated with human sites, and that's about 14,000 years ago.

Q All right. Now, so it's anywhere from 14,000 to 28,000 years ago?

A Right.

Q On present knowledge?

A Yeah.

Q Do we have any conclusive evidence that man was not here, say, 50,000 years ago?

A You mean is there any negative evidence that indicates that he was here?

Q Is there any, any way that you can say, more or less conclusively, that man was not here 50,000 years ago?

A 50,000 or 15?

Q Fifty.

A Ah . . . yeah, because man wasn't anywhere 50,000 years ago. He didn't appear until 30,000, I mean, in his present biological form.

Q What form, what forms of protoman existed 50,000 years ago?

A It would be a Neanderthal-like animal.

Q Is there any evidence at all that Neanderthal man lived in this hemisphere?

A No, there isn't.

Q Do you hold any theory as to how men got here into this hemisphere?

A Yes.

Q And how did he, according to your theory?

A According to my theory, which I won't take credit for but would subscribe to, during the heighth of the last glacial epic when the sea level was diminished, an expansive land bridge existed across the Bering Straits, through that area of the world that -- what we call Upper-Paleolithic People, people with Upper Paleolithic culture from Siberia, crossed north of the Brooks Range and came down along the east bench of the Rockies.

Q All right. And when did you think that occurred?

A 14 to 16,000 years ago.

Q All right. As far as the last glacial period is concerned, as it affects Michigan, what are the approximate

dates, if you know, of when that glaciation first began to affect Michigan and when it finally moved back up into Canada?

A Well, roughly 16,000 years ago most of the State was covered by glacial ice, and from that time, it began to slowly recede with minor re-advances here and there. Pretty much by 10,000 years ago, it was gone, for all intents and purposes, from Michigan territory.

Q You say 10,000 years ago?

A Yeah, some rough figure there.

Q Is that, does the glaciation of Michigan explain why you have found caribou bones in southern Michigan?

A Yes. The climate, the fauna, and so forth was different, and caribou were part of that different fauna.

Q As a Paleo Ecologist, in other words, I gather it's your testimony that the ecology of Michigan changed from the period of the end of the last glaciation to the present, that it changed somewhat, is that correct?

A Yes, that's correct.

Q And that the types of animals and fish and birds and so forth must have changed as well?

A Yes.

Q Did there come a time when things stabilized into the form that existed just before the white man entered the territory, or was the change still going on at the time

the white man came on the scene?

A Well, now, I'm not -- I'm sure we all know that environmental change always continues in some way.

Q All right. But we're talking about fairly rapid changes, are we not?

A No. No. I think all these changes are . . . all biotic changes basically should be understood, or understood better perhaps, as rather gradual, although some are more gradual than others.

Q Okay.

A I guess I didn't get to answer your question. I'm not --

Q Aside from the fact that things are always changing, was there any, you know, is it meaningful to say that a particular ecology is stable? Isn't it possible to say, for example, that a particular forest is a climax forest as opposed to a forest that is evolving more or less rapidly, and is it meaningful to say that the forest types, the climate and so forth of the Great Lakes Region, the Upper Great Lakes Region, were more or less stable at the time the white man first got here?

A Well, I find myself reluctant to answer that because . . . yes, more or less, but not entirely, because we do know very well that there were, for example, climatic fluctuations after Europeans arrived and that, you know, I guess you're asking me to kind of say, "Is that a

bigger or littler change than something else," which I don't know, I would be willing to sort of describe my understanding of how the climate changed through time and in what sequence and what, maybe what relative magnitude.

Q All right. Well, maybe I can come back to this in a minute. When the white man first came here, and I'll use Columbus rather than Eric the Red, by that time, as far as the archaeologists know, had the Indians, the people that had come across this land, had they pretty much differentiated themselves into groups or tribes or different races, perhaps, different cultures that could be described in meaningful terms that the anthropologists, generally, would agree upon?

A Yes, yes.

Q Could you give us an overview of where the major distinctions lay geographically and how these people are differentiated? Is it by rank or by looks or different cultural attitudes or what?

A Well, if we're talking about a broad distinction, we can, for example, at the time of Columbus or long before, see that the area occupied in Historic times in New York and in Ontario that was occupied by Iroquoian-speakers, is different culturally than, say, areas occupied by Algonquian-speakers. Now, we know those, from historic records, to be distinct, and we can see those distinctions

developing, say, as early as a thousand years before that.

Q All right. Now, I gather that the, for example, the Algonquian Indians were themselves differentiated into, at least in the eyes of Europeans, into different tribes or different cultures, is that true?

A Yes, in the eyes of Europeans.

Q All right. Were the Potawatomis, were they Algonquian?

A Yes, they were.

Q Also what we call the Chippewa?

A Yes, they were.

Q What about the Ottawa?

A They were.

Q What about the Hopewell?

A Were they Algonquian?

Q Yes.

A We have no way to know.

Q All right. Did the Hopewell build mounds?

A Yes.

Q Did they build mounds in Grand Rapids?

A Yes.

Q Did they build mounds in southern Ohio?

A Yes.

Q Are there Algonquian Indians in southern Ohio today, or were there in Historic sites?

A Yes, there were Shawnee.

Q Is there any explanation for why the Chippewas and the Ottawas didn't build mounds, or did they?

A Ah . . . To my recollection, they did not. No, they did not build mounds.

Q Is there something that gradually evolved, they began building smaller and smaller mounds, or is there some break --

A That's exactly what happened. They got smaller and smaller until they poof!

Q They grew lazy?

A Disappeared.

Q What happened? Do you have any idea?

A I would imagine it was a cultural tradition that simply, shall we say, became unpopular and finally fell into disuse.

Q All right, Doctor. Would you describe for me the theory behind radiocarbon dating? How does it work?

A In life, any organic form, a tree, human being, a deer, incorporates into itself through the process of respiration a ratio of normal carbon, carbon 12, and carbon 14, which is radioactive carbon.

Q What is that ratio?

A That's a known ratio. I don't know. I'm not a physicist, and I'm just familiar with the general terms.

Q All right.

A With what happened.

Q And then is it true that the ratio is fixed upon the material being incorporated into the organic material, is that correct?

A Yes.

Q And then the radioactive carbon, the carbon 14 breaks down, or degenerates?

A Right.

Q What's the half life of carbon 14?

A . . . I'm not sure.

Q What range of time would you say this -- assuming that carbon 14 had a relatively short half life, would that mean that radiocarbon dating would be useless for very, very great lengths of time?

A I know how radiocarbon dating can be used back to about 35,000 years ago, at the very outside.

Q Beyond that, it's not accurate?

A That's right, so, well, beyond that all of the radioactive carbon is gone.

Q It's gone? All right. Are there techniques, other radioactive isotope pairs that are used for dating objects older than 35,000 years?

A Potassium argon.

Q What range from 35,000 down to the present is radiocarbon

dating accurate within that entire span?

A. The accuracy varies. It's a matter of sampling or how many standard deviations you want to measure.

Q. All right. But if I wanted to date something that was ten years old, could I use radiocarbon dating for that?

A. Well, if you knew it was ten years old, you'd be spending a hundred bucks for nothing.

Q. But would it be accurate, that's the question?

A. Would it be accurate? No, it wouldn't.

Q. Why not?

A. Because the standard error would be greater than the ten year period.

Q. What is the standard error?

A. The standard error? The standard error -- A radiocarbon date is presented as a date, plus or minus a certain number of years, could be 1400 A.D. plus or minus a hundred years.

Q. Is that the standard error?

A. Meaning that would come within the range. Now, you can increase the standard error so that it could be 1400 plus or minus 200 years. By including another standard error, you could therefore, increase the chances of being within -- of being correct, but you expand the amount of years that you include.

Q. I follow you now.

A. Okay.

Q. What are the chances of your being correct? What are the chances of being correct if you use the standard error of 100 years on either side of the date you have selected?

A. I wouldn't know that.

Q. All right. Is it true that within the Historic Period there were conflicts between various Indian groups, either within the Treaty area that we're talking about or within it -- within areas not too far distant from it?

A. Sure.

Q. And could you give us an overview of those conflicts?

MR. GREEN: During what period, Counsel?

MR. STEKETEE: During the Historic Period from 1650 forward.

MR. DILLON: Could you read that question back?

(Whereupon, question was read by reporter.)

MR. DILLON: I presume by Treaty area, you mean the top two-thirds of the State?

MR. STEKETEE: When I'm talking about Historic area --

MR. DILLON: No, Treaty area.

MR. STEKETEE: -- I'm talking about a map that I have in my mind that has a line drawn on it. I don't know if the Doctor has the same map in mind, but I

think it would be fair to say that the upper two-thirds of the Lower Peninsula and the entire Upper Peninsula, for present purposes.

Q (MR. STEKETEE) Now, could you give us an overview of the conflicts from 1650 forward?

A I feel uncomfortable with that question because I'm really not, you know, prepared to testify on Indian conflicts. I mean, I can give general opinion, but --

Q Let me see if I can help you in terms of what I'm getting at: Were there not some very basic or fundamental migrations that took place, some changing in control of significant territories, things of this kind, that affected the areas that we're talking about?

A The Ojibwa had longstanding hostility with the Iroquois to the east, and they had longstanding hostility with the Sioux to the west, if that's what you're referring to.

Q Are there any records of any incursions by either of these hostile groups against the Ojibwa?

A Oh, yes.

Q Can you give any examples?

A No.

Q Were the Ojibwas in total control of the area throughout the Historic Period until the white man came -- excuse me, I guess that's a meaningless statement, isn't it -- throughout the Historic Period until they seceded their

land to the white man?

A Well, again, I'm really not prepared in this area. There are other, I understand, witnesses in the case that probably would be prepared.

Q All right. You don't know the answer, then?

A No, I don't.

Q All right. You mentioned in testifying, I believe, as to the site on Bois Blanc Island?

A Yeah.

Q That you had found large numbers of fish bones. You participated in that by examining the materials that were taken out of the dig?

A Yes.

Q Did you identify any of the fishes that were --

A Yes.

Q -- found?

A Yes.

Q What fishes were you able to identify?

A Well, there are long lists, and I won't pretend to be able to name every one of them, but I could name some.

Q All right. Let's back up and maybe we can approach this a little differently. What fish parts did you find preserved?

A All parts, essentially, of the fish skeleton and scales.

Q All right. Can you tell us what fish you did find?

A Ah . . . Whitefish of various species, sturgeon, lake trout, suckers of various species, bass, some carp of various species, catfish of several species.

Q Did you do the actual identification of the species yourself?

A Yes, I did.

Q Did you use scales principally for this?

A No, the bone morphology.

Q All right. Did you find whole skeletons?

A No, parts of skeletons.

Q Can you give us an example of, let's say you find a bone with some kind of -- what kind of bones did you find most often?

A You find an opercular bone from the cheek of the fish.

Q All right.

A Each species, that bone in each species takes a slightly different configuration. The general process is to take that bone that you took from an archaeological site and using a large reference collection of ^{skeletons of} ~~skeletonized~~ known age, sex, fish species, to compare and to find one that looks just like the one that you have.

Q All right.

A And to say, "Okay, that is an individual of that species."

Q That assumes that there hasn't been extensive evolution of the specie --

A That's true.

Q -- in the period of time. And that is your assumption?

A Yes, that is my assumption.

Q Did you make any findings with regard to the relative numbers of fish that you found in this particular dig?

A Yes.

Q What were those conclusions?

A I really cannot recall again the exact numbers, off the top of my head. At this particular site, by far the greatest number of individuals were members of the whitefish family.

Q All right. In testifying about the St. Ignace site, or one of the St. Ignace sites, you mentioned that the method of burial involved burial of a large number of people in one site?

A Right.

Q Then you have mentioned also that you didn't find whole skeletons, but just bones, sort of scattered around willy-nilly, is that substantially what you have said?

A Well, the practice was when a person died, they buried the person on an exposed scaffold, and then the burial, the actual burying of the bones might take place at five-year or ten-year intervals, so if you had a person that died ten years from the time of the last burial, the chances are that skeleton would have fallen apart and

would probably be incomplete. But, if you had somebody that died two days before, then chances are that burial would be totally complete, and you get the whole spectrum in between.

Q All right. What evidence is there of these scaffolds?

A Only historic evidence for those, namely witnesses describing them.

Q Can you name any witnesses that described those?

A Ah . . . Yes. Cadillac described them for the area around Fort Duvois near St. Ignace and, you know, the time that he was Commandant at that Post, 1695 to 1700, roughly, give or take, plus or minus a year or two on either end.

Q Standard deviation?

A One standard deviation.

Q All right. Turning to a somewhat different subject, just to the techniques of anthropological investigation, would you say that the techniques of anthropological investigation have advanced since the science was founded?

A Yes, I think so.

Q When was the science founded?

A Well, I guess I would roughly take it back to the middle of the last century.

Q Is it fair to say that if someone in the middle of the last century engaged in a dig of a particular site, that

without the modern techniques that are available, he might have greatly disturbed that site without obtaining from it all of the knowledge that might be available today, had you dug the site today?

A Yes, that is fair.

Q Is it your belief that in the future, there will be advances, similar advances of technique that will make it possible to obtain more knowledge from sites as they are dug in the future?

A Yes, yes, sir.

Q Would you also say, then, that there is, every time a site is invaded, so to speak, there is a kind of a lost opportunity that takes place, the lost knowledge that we miss out on because we dug the site now rather than later?

A Are you trying to put me out of business?

Q No, I'm not trying to put you out of business, I'm just asking you if that isn't true?

A That's true, and, in fact, we recognize this is the case and, therefore, we try to preserve, always preserve samples of test sites.

Q That's my next question. That's my next question.

All right. I assume, then, that anthropologists feel it incumbent upon themselves to take very careful field notes as they are going through a dig?

A Yes.

Q So at least to a certain extent, the records can be reconstructed?

A We view that as an ethical responsibility.

Q All right. But, nevertheless, no matter how careful you are, you may not anticipate some advance?

A That's right.

Q And therefore, not take the right notes, is that correct?

A That's right.

Q Is there a code of professional ethics for anthropologists?

A Yes, there is, and for archaeology.

Q And could you refer me to it?

A I could get you a copy of it, yes.

Q Would you do so through your attorneys, please?

A Sure.

Q What, if I may use the term that accountants might use, what audit techniques do you use in the field of anthropology, archaeology, to prevent the imposition of fraud upon the science? Just as an example, Piltdown, how do you prevent against the imposition of outright fraud or mistakes upon the science in general?

A Primarily through peer review and openness, openness with which archaeology, as a profession, has always regarded the data that we work with.

Q Publication and peer review?

A (Witness nodding affirmatively.)

Q Is that correct?

A That is correct, yes.

Q Those are the primary audit techniques?

A That's correct.

Q How do these sites come to your attention?

A Ah. . . In a number of ways. First of all, on occasion we actually set out to locate them through some kind of a sampling process and just walk over the ground and try to discover, through surface material, surface indications, where the sites are. We also do testing of the ground where ground cover is very heavy, in order to discover where sites are. In many cases, these come to our attention through road cuts, through construction of highways, reservoirs, farmers plowing their field, through urban expansion projects of various kinds.

Q All right. Now, what might happen? You might get a call from some school kid who says, "I stumbled on an arrow head"?

A Right.

Q He calls the Museum directly in Grand Rapids, or he might call you.

A Right.

Q Now, you're aware that there may be a potential site. How do you go about determining who is going to do the dig? Why can't I? I'm just a citizen. I don't know

anything about it, but why can't I go out and dig around out there?

A. For the same reason I can't practice law.

Q. Do you have to be licensed to engage in this activity?

A. No, but you certainly should be competent, I think.

Q. What laws are there, if you're aware of any, that regulate who may engage in this particular practice?

A. There are no laws.

Q. All right. Well, then, practically speaking, how does this get determined?

A. Ah . . . There's a voluntary organization called the Society for Professional Archaeology, which has a code of ethics, research standards, and so forth, and which publishes a directory of people who meet certain basic qualifications.

Q. All right. Now, these people, isn't there a certain amount of competition among them? They all want to get Nobel Prizes and here's a hot new site and you must have 50 of you guys competing to get that particular site. How do you decide those kinds of conflicts?

A. Well . . . there are only a few archaeologists in the State, and there are lots of sites, and this is generally true of the whole country, so, in fact, quite the opposite is the case, and we are usually trying to argue into each other / discharging responsibilities because the

burden is very great.

Q Could you tell us what, in general terms, what the substance of the testimony you have been asked to give in this case is?

A I have been asked to review and describe the evolution of Indian fishing in the upper Great Lakes area.

Q And could you give us an overview of what your research has turned up in that subject matter?

A Well, in a very basic way, that fishing or fishery source had been the keystone of Indian economy in the upper Great Lakes for many milleniums. Most likely, since the time of the birth of Christ, the Indian people had been fishing very intensely in the upper Great Lakes, and that, in fact, this resource was so important that it's only through that resource and that exploitation that we can really understand the essence of these Indian cultures.

Q All right. I think I'll defer any further questioning for the time being, and turn the thing back to Mr. Freeman.

EXAMINATION (Continuing)

BY STEWART H. FREEMAN, Esq.:

Q That last statement you made, answering Mr. Steketee's last question, what kind of evidence, hard physical evidence is there of this intensive fishery you described?

A Well, there's several varieties. First of all, there's the evidence from the technology itself, the indication

of . . . of a great many items of fishing gear and a great many fishing techniques being employed, not only in the archaeological sense, but also in the historic documentation.

Q Well, if I could interrupt you for a second, now, the historical documentation, if I correctly understood you this morning, would be 1650 forward?

A (Witness nodding affirmatively.)

Q Is that correct?

A Right.

Q What is the period of the archaeological findings?

A Prior to that time, and the general picture of Indian fishing has the earliest evidence appearing somewhere around 2,000 B.C.; no evidence of any kind of remarkable fishing complex at that time, just the fact that there is some. As we go through time, the evidence available indicates an increased reliance on fishing; the first major development being the introduction of the nets and the employment of nets in fishing, which seems to take place during the period around the time of the birth of Christ, and then of the obvious employment of these techniques to great efficiency after 800 A.D., such that we see not only the technological aspects of fishing in great evidence, but also certain changes in the settlement system appearing, which I believe to be a direct

reflection of people living near the proximity of this resource, namely the streams, spawning shoals and so forth.

Q What kind of evidence is there that would indicate that the fishery was the prime source of food, if you can tell us?

A The actual bones from the sites would indicate that, namely sites that are just chuck-full of fish bones.

Q How many such sites are there in Michigan?

A Dozens.

Q How many of those have you examined?

A Several dozen, a couple dozen.

Q Of those couple of dozen, how many were totally excavated?

A None -- one! The one I mentioned this morning.

Q Are you saying, then, it's impossible that if a different ten by ten square had been dug, you might not have found a great pile of elk bones or caribou bones?

A Well, it would be possible that such a pile of bones could be found, but I think we can say, with 100 percent assuredity, that enough sites have been sampled and have been sampled extensively enough that it can leave no doubt that fish were the primary focus of these economies, and Mr. Steketee has already revealed some of the reasons why we don't dig the total sites.

Q You stake your professional reputation, then, based upon sites you have reviewed, on the proposition that the

Indians relied primarily upon fish?

A Yes, sir.

Q What data is there as to the source of the fish, comparing the three categories: Inland lakes, inland streams, and the Great Lakes?

A Hmm . . . Well, when you have an island where there are no streams and no lakes, and the island is in the middle of Lake Michigan and the site is full of whitefish bones, the only source of those fish is the Great Lakes or the proximity of the site. The fauna which is typical of some of the smaller inland streams, namely, I suppose, the trout and so forth, do not, as far as I know, appear in any great abundance, if at all, in archaeological sites, to my knowledge. There are some sites on inland lakes which do contain some fish bones. These bones are generally reflective of the fauna that is typical of whatever kind of lake that that site happens to be on. For example, I could think of a site of the Late Woodland Period on a shallow -- what is today a shallow, rather warm water lake, and in the site we found predominantly members of the bass family, smallmouth bass, predominantly. Pike occurred there. So, I think it seems to me that the obvious thing is that the fauna in the site is going to reflect available fauna in the natural state that's adjacent to where the site is

located, and since most of the sites are located on the shores of the Great Lakes, that's the kind of fauna that appears in these sites.

Q How many of those sites have you been able to identify in terms of the tribal group that inhabited them?

A Very few.

Q Now, these sites that are near the Great Lakes, you described one this morning, I believe, where there is a stream 15 feet one way and the lake was --

A Yeah, right.

Q -- 30 feet the other way? What percentage of sites along the Great Lakes are like that, fairly close to an inland stream?

A I would guess about two-thirds, which is a rough estimate.

Q And the other one-third you're saying are near the shoreline of the Great Lakes?

A Right.

Q There is no other body of water nearby?

A Yeah.

Q Is there, among those one-third of the sites --

A Uh-huh.

Q -- is there a common denominator in terms of location, in a bay or some physical body such as that?

A Well, you asked a very good question and one that interests me a lot, and I regret to say that I really

can't answer it. I would like to be able to, and it is a recent area that we're now working on, to try to provide a more strong correlation between natural features, features of the natural landscape like bays, peninsulas, sandy beaches, as opposed to rocky ones, and so forth, but at this point our research is not far enough along that I really feel I could answer it.

Q You understand what I'm getting at, don't you?

A Well, I understand that you're asking an interesting question.

Q Well, I'm improving. See how much I'm learning?

A It certainly seems like you've been doing your homework.

Q Have you read the report that Helen Hornbeck Tanner wrote, which is also kicking around in this case?

A I understand that she has written two -- or is it just one?

Q I have only seen one.

A One? I have read it, yes.

Q Did you find that report authoritative?

A Well, I'm not a historian. It was impressive to me, but that may be neither here nor there.

Q But you have, in your work, had occasion, have you not, to take published materials of others and occasionally, instead of doing your own original field work or your own original research, relied upon an article written by others?

A Yes, sure.

Q So do you, in your professional capacity, evaluate the work of others, at least to the extent of whether you were prepared to rely upon it in reaching your own conclusions?

A I have used the work of Helen Tanner many times, and I have the highest respect for her, if that's what you're asking.

Q Is there anything in that report that you disagree with?

A Yeah, there was some. There were some things, I guess.

Q Can you give us an example of what you disagreed with?

MR. GREENE: If you would like to have a copy?

THE WITNESS: I would prefer to refer to a copy of it.

MR. GREENE: (Handing document.)

THE WITNESS: Well, I'm not sure that I can find some of the things I was thinking of right off.

MR. GREENE: Do you want to take a break and have him spend more time on it?

MR. FREEMAN: Why don't we go off the record a minute?

(Whereupon, there was a short break.)

MR. FREEMAN: Back on the record.

Q (MR. FREEMAN) Have you had a chance, during the short

recess we have taken, to refresh your recollection, Professor?

A Yes, I found the -- You asked me if I, as I recall, if I agreed with everything in this.

Q Right.

MR. DILLON: I would just like to note for the record an objection to any answer of the Professor which is not an opinion in his field of expertise; that would be as an ethnozoologist.

MR. STEKETEE: Are you saying, then, his field of expertise is simply ethnozoology?

MR. DILLON: That's what you labeled your expertise, didn't you?

THE WITNESS: (Nodding affirmatively.)

MR. DILLON: Yes?

THE WITNESS: Yes.

MR. FREEMAN: Well, would you be agreeable to noting your objection for the record?

MR. DILLON: I just want to note it. I'm not saying he can't answer.

MR. FREEMAN: Okay, fine.

THE WITNESS: The item that I disagreed with here is, Dr. Tanner says dried and smoked fish was an item of exchange in the Indian trade before Europeans came to the Upper Peninsula.

DR. MASON: What page is that?

THE WITNESS: That's on 47.

Q (MR. FREEMAN) It is your opinion that that statement is not correct?

A It may be correct, but I just don't know how one could show that.

Q Because of the lack of written records, is that your point?

A Yes, and because of the lack of dried and smoked fish in the archaeological records. So I would suspect that because there may be historic records in this regard, Dr. Tanner has assumed that this took place in Prehistoric times, which ^{it} may well have, but I simply point out that there is no evidence that it did.

Q There would have been, would there not, physical evidence which, presumably, you would have counted of any kind of an elaborate smoked fish operation because wouldn't you have found the smokehouses in examining village sites?

A Well, again referring to the ethnographic and historic records on this point, they simply built a simple framework, split the fish and laid them there under the fire, so that the only archaeological evidence that you would see for that is the remains of four posts.

Q How far apart would those posts have been spread, do you know?

A (Witness shaking head negatively.)

Q You don't? Okay. You have to give a verbalized answer. Otherwise --

A I don't know.

Q Okay. Are there any other points which you consider to be substantial where you find yourself not agreeing with Dr. Tanner?

A No. I can't think of others. I remembered that one point as I read through her report. I don't remember other items that I would disagree with her on.

Q Do you consider her report to be authoritative?

A I am not in a position to judge whether her report is authoritative. I only can say that Dr. Tanner has a very excellent reputation among scholars that work in this field.

Q Are you familiar with Bald, B-a-l-d, History of Michigan?

A I have read it.

Q Did you consider that to be authoritative?

A No.

Q Would you rely upon that in doing research for this case?

A (No response.)

MR. GREENE: Is the question -- Could you repeat the question, please?

(Whereupon, question was read by reporter.)

THE WITNESS: In what regard? I'm not --

You mean if I forgot when the French first went to Sault Ste. Marie and I wanted to look up the date? I would refer to Cleveland Bald, but if I wanted some in depth analysis on some obscure and specific point, I would not.

Q (MR. FREEMAN) Okay. That's a sufficient answer. Are you familiar with a book entitled American Indian Policy in the Formative Years by Francis Paul Prucha, P-r-u-c-h-a?

A Yes, I am.

Q Is Father Prucha's work authoritative?

MR. GREENE: Is the question, is that book authoritative or is all Father Prucha's work?

Q (MR. FREEMAN) Is that book -- I don't know what else he may have read.

MR. DILLON: I object to an answer which contains an opinion outside the Doctor's area of expertise, which would be ethnozoology. I'm just noting an objection.

Q (MR. FREEMAN) Do you consider Prucha's work authoritative?

A I have some respect for him as a scholar; however, I think that he has an unfortunate bias.

Q And you think the bias affects the historical --

A Yes, I do.

Q -- conclusions he states in his book?

A To some degree.

Q Are you familiar with a booklet entitled 'A Brief History of Michigan Indians by Charles E. Cleland?

A Vaguely.

Q Do you consider that to be authoritative?

A No, I wouldn't.

Q Why not?

A Because it was written for, essentially, secondary school audience.

MR. GREENE: I'm sorry to interpose an objection, but are you both talking about -- Do you understand what you're both talking about when you're talking about authoritative?

THE WITNESS: Perhaps not.

Q (MR. FREEMAN) Maybe I can define it. As I'm using the term, Professor, I'm using it in the sense of if in these books I have asked you whether or not they are authoritative, they were a statement of fact, which was not a matter of common knowledge, which somebody had to go out and dig into some original records. Would you be willing to accept that statement from one of these sources, or if it were a point which you were going to include in a scholarly paper and testimony in this Court, would you feel you could not accept it at face value; you would feel you would have to go back to original sources?

A I guess I would be reluctant to make any statement at all

about any book that I had ever read, on that basis, because, of course, I think every book I have ever read has demonstrated to me some -- or scholarly book, perhaps I should say, some statements which I think are subject to certain biases of interpretation, which I might not agree with. Therefore, I would feel that the question about any book, including my own, would be so broad, I would be reluctant. I mean --

Q Do you see the point I'm leading towards, though?

A No, I guess I don't.

Q Let me try and explain it to you and ask you some more questions.

A Okay.

Q This report which you authored and Counsel for the Indian groups have asked us to stipulate to the admissibility of, contains at the end a bibliography citing us to many, many published works.

A Um-hmm.

Q And the point I'm trying to explore with you generally, before we get into some specific points, are whether you are saying that these sources are all authoritative; that it is not necessary for Charles E. Cleland to do original research in any of these areas or to examine any of the original documents because someone else has done that, and we may accept at face value their work. Is that your

position?

A Well, I'm sorry if I appear resistant, but I don't want to be. I guess I have a different concept of scholarly research. I think that from most of these sources, many of these sources are written by people who I respect and whose work I can rely upon. They did an honest effort in their research. But, over and above that, people then take those same basic facts and express opinion. Some of those opinions I may agree with and some I disagree with, so it's hard for me to say in X given book that I'm going to say that this person is a complete authority on everything because I consider him to be a competent scholar. In other words, I can consider people to be quite competent as scholars, and not agree with all of their conclusions.

Q Of course, isn't that really the basis for the great academic debates of the last dozen centuries?

A I suppose.

Q Two equally competent, equally honest people reach opposite conclusions and then write many articles back and forth.

A That's right.

Q But that's really one of the questions that I want to explore with you. As a witness in a specific piece of litigation as opposed to a scholar engaged in a scholarly

debate, in utilizing secondary sources, utilizing the writings of others who had, in turn, done some original research, did you do any inquiry to insure that those people had competently evaluated the specific facts for which you cite them?

A Well, my own knowledge is of both the facts and the people involved, and some fields of scholarship are only kind of proportionately relevant to the judgments that I make. In other words, I know nothing about linguistics. I wouldn't know the difference between a Chippewa and an Ottawa if they were speaking their languages, simply as a matter of their dialect, I wouldn't know which was which. If I read a report which described the phonetics that are used in the Ottawa language, I might, you know, be a little more gullible than if I was reading a report which describes some subject material that I knew very well. So I guess the answer to the question is that I don't think I can answer a broad question like that, but I would be willing to answer it specifically on any given point.

Q Well, let me just make sure you understand my general question, because I would like to get more specific with you.

A Okay.

Q There are attached -- The attorneys for the Indian groups

have sent me this report. Attached to it are many, many pages.

A Which report are you --

Q I'm looking at a report which says (indicating) --

A Oh, yeah, that's right.

Q -- report by Charles E. Cleland. There are many, many pages of what I call citations attached to the end of this.

A Yes.

Q References cited. Are you prepared to stake your professional reputation on the fact that each of these citations not only contains a recitation of the fact for which you cited it, but that, in fact, the author of that publication has correctly stated the facts, the truth of the citation of that publication?

MR. GREENE: I object on the grounds that that publication question has been asked. I believe the witness has answered it to the best of his ability.

MR. FREEMAN: Well, I would prefer an answer.

THE WITNESS: No.

Q (MR. FREEMAN) Okay. Thank you. Let me take one specific one. Maybe I can focus on this better for you. I'm turning to page 45 of this report, and I'll show you the page so you and I are talking about the same thing.

Would you turn to page 45 of your copy of your report.

A Yes, sir.

Q Now, at the top of the page, coming down one, two, three, four, five -- oh, starting about six lines down, going down to the end of that paragraph at the top, there is a reference to Adney and Chapelle, 1964.

A Yes.

Q You're describing in that paragraph canoes 10 to 28 feet, capable of carrying two to fourteen persons and up to 2,000 pounds of cargo. Then you go on and, as I understand you, and let me make this a question: Are you saying that these very large canoes were used for fishing purposes by Indians?

A Well, they were certainly canoes that the Indians had. They were big, called freight canoes.

Q Freight canoes? But did you intend to say in this report that there is any evidence that those canoes were ever used for fishing purposes?

A . . . I certainly think they were.

Q You cited references Adney and Chapell.

A Right.

Q Is this right?

A That's right.

Q I show you a book entitled The Bark Canoes and Skin Boats

of North America, United States National Museum,
Bulletin 230, Adney and Chapelle. Is that the book?

A That's the book.

Q You cited pages --

A Right.

Q And I believe there is another reference to page 42 in
this book, is there not, or 142 --

A Right.

Q -- further on in your report.

Would you show me, on pages either 8 or
142 of this book, where they say that those kinds of
canoes were used for fishing?

A I don't think it says on page 8 that it was used for
fishing. Does it say that here? It gives the . . .
gives the length and capacity of the canoes. It says
that they were capable of crossing open water in good
weather five leagues. That's what it says on page 8.

Q Well, let's go back in your report, page 44, beginning
in the middle of the bottom paragraph there, three lines
up from the bottom you say prior to the introduction of
these boats of European design and when they became
popular during the 19th century, fishing was done from
birchbark canoes. Contrary to the common belief that
these were small, frail craft, Adney and Chapelle note
that the common freight canoe . . .

Am I misreading it? I read that, as you're saying, that fishing was formerly done from small boats, but contrary to the popular belief that all fishing was done from small boats, these common freight canoes were used for fishing purposes.

A Well, that is generally correct. There is that general implication. I did not mean, and I don't think that I did say that that there is an indication, direct indication that they fished from the freight canoes that you described. The point that I wanted to make here is that birchbark canoes could be made of considerable size. They were capable of journeying out over the open waters of the Great Lakes, and I certainly see no reason to think that people didn't, from time to time, fish out of them.

Q You have no reason to believe that people did not, from time to time, fish out of them, is that what you said?

A Yeah. Now, there were large boats available.

Q I'm trying to separate, Professor, opinion from fact. You're really giving me an opinion, aren't you, as opposed to testifying as to a historical or prehistoric fact?

A But . . .

Q I'm not saying your opinion is necessarily wrong; I just want to make sure whether we're talking opinion or fact.

A What is the statement of fact that you think that I might be opinioning about?

Q Well, is there any historical document known to you in Adney and Chapelle, which you cite, or some other source, that such boats were regularly used by any Indian groups for fishing in the Michigan waters of the Great Lakes?

A No.

Q Is there any evidence with which you are familiar, hard physical evidence, discovered at some archaeological site or some historic site, which would tend to indicate that such canoes were used in the Michigan waters of the Great Lakes by Indians?

A Just used?

MR. STEKETEE: I think he's asking -- Was your question were they just used, or used for fishing?

MR. FREEMAN: Yeah, used for fishing.

THE WITNESS: My -- Are you asking my opinion?

MR. FREEMAN: No, no. I'm asking you if you are aware of anything which would tend to establish that?

THE WITNESS: No, I'm not.

Q (MR. FREEMAN) Then this serves to illustrate the point I was trying to get at with you: A reasonable man would say, as you did, if the canoe was there, probably somebody used it for fishing, but my point is that is not fact, that's opinion or conjecture based upon the fact. You

understand now --

A I understand.

Q -- what I'm trying to get at?

A The original quotation was merely to point out that canoes, in fact, were very seaworthy, large and seaworthy vessels in some cases. I mean, there's another way that canoes can function at fishing besides people throwing nets over the sides of them. For example, transporting people out to the islands where archaeological evidence would indicate they are fishing. Now, it is true that --

Q You mean fishing on the shoals of the island?

A No, I mean out to the islands themselves.

Q How would they then fish? I'm not --

A You mean when they get out there?

Q Yeah. They take the big canoe out to the island. Then what do they do?

A I would assume that they have not only big canoes, but also little canoes, and they probably fished out of all kinds of canoes.

Q Do you know of any evidence in historical materials or archaeological finds which would indicate that fishing barrels were shipped in these freight canoes? Wouldn't that be terribly dangerous as the barrels shifted in a canoe?

A Well . . . the historic records are full of, incredibly

full of all kinds of evidence for all manner of hardware being shipped in all kinds of containers, including barrels, in freight canoes, throughout the whole Historic Period, or at least until barge sailing vessels were finally plying the Lakes.

Q Could you give me just one specific example of a historical reference to fish in barrels being shipped in a freight canoe for any distance beyond a mile or two or five or ten?

A I'm not -- I'm not prepared to testify to historic references in that regard.

Q Then it may or may not be there, but you just can't answer the question?

A I can't answer the question.

Q Is my understanding --

MR. STEKETEE: Excuse me, as a point of clarification, are the two Indian tribes joining in Mr. Dillon's objections that were voiced a few minutes ago?

MR. GREENE: That's correct.

MR. STEKETEE: Is that correct?

MR. GREEN: I speak for the Sault Ste. Marie Tribe of Chippewa Indians.

MR. STEKETEE: And you are joining in that objection, too?

MR. GREEN: Yes.

MR. DILLON: My objection was that the
is
expert witness/ testifying to his opinion. His opinion
is only relevant to his area of expertise.

MR. FREEMAN: We certainly understand that,
Mr. Dillon. I think our area of confusion is coming in
that we understood it to be represented that
Professor Cleland would be asked questions on direct by
the United States and Indian groups concerning events
subsequent to 1650 or 1700. Am I incorrect on that?

MR. DILLON: That's correct. My only
objection was that --

MR. FREEMAN: I do understand your objection.

MR. DILLON: My objection originally was
to any areas that he may disagree with Miss Tanner's
report that were outside his area of expertise. It was a
very limited objection.

MR. GREENE: I'm not sure it's worth
continuing this dialogue. I don't understand what your
last comment was, Mr. Freeman, about Dr. Cleland
testifying regarding all historic facts subsequent to
1650. Is that what you said?

MR. FREEMAN: No, I'm saying if you have
changed your position since you represented it to us, I
just don't understand the scope of what this witness has
been used for. I'm putting you on notice. I may be

confused.

MR. GREENE: You might try reading Dr. Cleland's report, and that might give you a better understanding.

MR. FREEMAN: The report still stands?

MR. DILLON: My objection, to further elaborate and clarify, was when Dr. Cleland stated there were certain aspects of Dr. Tanner's report that he was very impressed with, it was outside his area of expertise, and therefore he couldn't opine on the authoritativeness of it as to his opinion of the authoritativeness of it outside his area of expertise. I think the question is outside the scope of his examination.

Q (MR. FREEMAN) Okay. On page 46 of your report, Professor Cleland, the bottom paragraph says, the historic records clearly indicate that fishing was the cornerstone of these Indian economies at the earliest period of French contact and that despite all the pressures of European conquest, remained the most important economic pursuit until at least the 1930's. What historic records are you referring to in that paragraph?

A The ones that are in the report, Mr. Freeman.

Q You mean the attached exhibits?

A No, the ones that I cited. Here, let's see . . .

commencing on 46 and going to the next . . . for the next 10 pages, these are Joutel, Sagard, Alexander Henry, Schoolcraft, Cadillac, La Potherie, so forth.

Q These written accounts you say support that conclusion?

A Yes.

Q Now, did you personally examine all of the reports which you cite?

A Yes.

Q You read all of these documents in their entirety?

A Well, I wouldn't say in their entirety. I read the parts that were pertinent. For example, Rau talks about fishing and talks about fishing in Ancient Egypt as well as the upper Great Lakes and I skipped over some parts of it. I did, however, read all, for example, in Kinietz, who provides a summary of a lot of the ethnographic material of the upper Great Lakes. I read over what he had to say about Indian fishing and various tribes and so forth.

Q Did you review all of the literature available?

A No, I don't think I did. I think that I did what could be described as a rather broad brush treatment of this material.

Q How did you, for example, select Kinietz as one source to use?

A Kinietz was a handy reference volume. He brings together

and summarizes a great number of sources, particularly
The information from the Jesuit Relations, which otherwise
you'd have to plow through a great many volumes to pull
out, and I have generally found him to be quite reliable.

Q Is Kinietz still alive?

A The last I heard, he was an orange farmer in California.

Q But he is alive?

A The last I heard. I don't think he's been associated with
anthropology for quite a number of years.

Q Well, his book is 1965, is it not?

A I think that's a reprint of his book, which I think was
published in '45, or somewhere around there.

Q Now, do you know --

A Maybe earlier.

Q -- what he did in writing that book? You indicated he
reviewed some Jesuit papers. What else did he do, do you
know?

A I can only give an opinion based upon what it appears to
me he did, and that is to go through relevant historic
data which bears upon the Indians of the upper Great Lakes
and their history approximately from 1615, the earliest
date being the contacts of the French in Ontario among
the Hurons, and he follows through on those historic
references until, oh, approximately 1800, I would say, or
somewhere around there, tries to provide a general summary

of the history and ethnography of peoples of the upper Great Lakes.

Q Now, did you just rely upon Kinietz' work, or did you read his original sources?

A For the most part, I relied upon Kinietz. I did, in some cases, look at the original sources.

Q How did you decide which original sources you wanted to look at?

A Well, I didn't use any systematic method.

Q Is that the normal way of researching matters in your profession, so that Kinietz reviews the original records, you go to Kinietz, and presumably down the line, somebody only goes back to Cleland?

A On this point it's like, in my view, again it's like killing fleas with a baseball bat. If you want to make a case that fishing was important in the Great Lakes, it's not difficult, does not require that you go back to original sources, they're mentioned time and time again. My intent here was to provide a general and perhaps even secondary indication that fishing was an important economic pursuit during the period of European Contact.

Q Well, not all of these sources relate to the Great Lakes, do they, the ones you cite?

A Which ones are you referring to specifically?

Q I'm just glancing through them generally. Do you

understand all of these sources you have referred to as establishing that there was an Indian fishery in the Great Lakes?

A Yes, that's how I understand it.

Q That's what you intended to use them for?

A Yes.

MR. GREENE: Which pages are you referring to, 46 to 56?

MR. FREEMAN: The same pages that I previously referred to.

Q (MR. FREEMAN) During what seasons of the year were the fishing activities, described in these various sources, taking place, all of them in the same season or different seasons?

A Various, various seasons. Basically, there are some descriptions of fishing through the ice with nets. Those, I presume, would be during the deep winter months. There are others that describe fishing that must have taken place during the summer. Some of them we know precisely on what day. For example, some of the references made in the Schoolcraft Journals.

Q You consider the Schoolcraft Journals to be authoritative?

A Well, again --

MR. GREENE: I would object on the grounds that I don't understand what authoritative means.

Q (MR. FREEMAN) Is it your impression that Schoolcraft attempted to record the truth in writing his journals?

A Oh, yes.

Q Understanding that you never met Henry Schoolcraft --

A Unfortunately.

Q -- based upon your research, does he appear to be an honest man?

A Yes, he is an honest man.

Q So if Henry Schoolcraft wrote that something happened a particular way, he was a scholar you can rely upon as surely as though you had been there observing?

A No.

Q Almost as surely?

A No. Henry Schoolcraft, for all of his honesty and all of his talents, all of his intelligence, was a product of his era, and he regarded the events around him in that light. Now, in many instances, and I would suppose in the great majority, those would correspond to the experiences that I suppose all of us would share with Henry Schoolcraft, but there are others that I think, importantly, are different, and therefore I think that I would have to reserve my judgment and say no, not in every case.

Q Well, would that kind of reservation be true as to all of the sources you cite in this report?

A Yes.

Q How do you determine whether or not a person who records facts in a journal or in a diary has a bias or prejudice which is affecting their recitation of facts?

A Well, I suppose it would be a matter of learned judgment. In other words, if one was familiar with the inclination of a person, of his beliefs, how he regarded the subject upon which he wrote, then one would be in a better position to, in a sense, read between the lines rather than taking what he has to say, she has to say, at face value.

Q So as to those sources relied upon by Kinietz, which you did not examine --

A Right.

Q -- you, in effect, are relying upon Kinietz having sorted out the bias and prejudice, if any?

A No, I'm relying on Kinietz to accurately transcribe what he read in, for example, The Jesuit Relations, and I have had enough experience with this particular book over the years in checking back to the original sources from time to time, that I have found him to be a reliable scribe. And so I think that I can take what that man said The Jesuit Relations said, and then make my own interpretations.

Q The Jesuits would have had a bias, though, wouldn't they?

A You bet they would have. They did.

Q Wouldn't their bias have been, well -- How do you conceive

their bias? I don't want to put words in your mouth.

What do you conceive the Jesuit bias to have been?

A Well, all the people that, in those days, that were out in contact with the Indians wanted something from them, and the traders were there because they wanted furs. So, you know, if they got furs, then they described the Indians as being, you know, generous, forthright, honest. If they didn't get furs, then they were, you know, vermin-covered, dishonest cheaters. The Jesuit Fathers were trying to save souls, and if people converted, then they were philosophical, intelligent, perceptive. If, on the other hand, they did not convert to Christianity, then the Jesuits described them as being children of the devil, of being ungodly, heathens. The same can be said of soldiers that went out among the Indians in those days, of the adventurers. Their opinion, I suppose, like ours of today, are really biased by the circumstances. So the Jesuit Fathers were anxious to convert people to Christ, and where they had success, their description of the peoples they were among are glowing, and where they did not have success, you would think from the descriptions that they were talking about animals.

Q Would this have shown up in descriptions of such things as hunting and fishing activities, a desire to show that the Indians had converted or were about to convert, were

leading very successful and happy lives?

MR. GREENE: Do you understand that question?

THE WITNESS: I -- I think so. Some realms of human endeavor were more subject to bias than others; I would say that the attention that early explorers, missionaries, soldiers and so forth, paid to the Indians, were more uniform and unbiased in some cases, and I think the attentions that they paid to how people hunted and how they fished, how they trapped, articles of costumry, how they painted their faces or fixed their hair, are more reliable than some other realms of culture. For example, these people, these Frenchmen would, you know, ask people about their kinship system, and they would get answers that were truthful answers, and the French would think that they were being lied to because they couldn't understand a kinship system as among the Hurons where people traced a relationship between women or through women. That was totally, so totally foreign to the French that when Huron told them that that is how they did it, they believed that they were being lied to, deceived. So my answer is that I think that while it is conceivable that the bias of these Frenchmen did, in some ways, affect the descriptions of subsistence activity, there is relatively less chance, by far, than in

description of religions, political systems, social systems, and other less mechanical or more philosophical areas.

Q (MR. FREEMAN) Would a trader of the times, based upon the research, want to report back to his superiors that the people with whom he dealt were starving, but that he had taken a great many things of value to European society from them, given them back relatively nothing of value?

A No. I don't think that was true.

Q You don't think --

A They did, lots of times, report that back, that people were starving, but I think that was true, they were.

Q But based upon your research and your judgment, the traders would have had no bias that way, to attempt to show that they were offering fair deals when they traded furs for baubles or whatever?

MR. GREENE: I would object to that question. I don't know what traders you're talking about, what period you're talking about, where they were located, who they were working for. There's no foundation for many of the things that are contained in that question to the witness.

Q (MR. FREEMAN) Do you understand the question?

A Yeah, it's too broad, I guess.

Q What records of traders did you review in writing this

report or preparing for litigation in this case?

A Well, they're presented in the report.

Q Tell me which ones they are. Be very, very specific so that Mr. Greene can follow us.

A (Witness looking through report.) What was the question again?

Q What reports or records of traders did you rely upon in writing this report?

A Of traders?

Q Traders.

A Traders, okay. Well, Alexander Henry. The other thing is that --

Q Well, just a second. That's the only trader upon whom you relied, Alexander Henry?

A Well, in what sense do you mean trader? I mean, even the priests traded.

Q Well, I would refer to the priests as priests. I mean, trader to the extent that the --

A That would reflect your total misunderstanding of what the priests were doing because they controlled the trade.

Q You're saying the principal reason that the priests came to that country was for commercial purposes?

A No, but it was sure one of them.

Q All right. What writings of priests did you rely upon, or other clerics, I should say, priests refers to a specific

religion.

A Joutel, Sagard; Henry was a trader, Williams was a -- whoops! Excuse me. Cadillac, who was primarily a soldier, but also a trader; Lahontan, who, if memory serves me correct, was a trader; Schoolcraft, who was, I suppose, a diplomat/explorer at this time. Dablon --

Q What was the last one?

A Dablon, who was a -- who was a priest. I guess that's it.

Q Now, you're saying you reviewed the papers of all of these people in preparing this report.

A No, I didn't say that.

Q All right. Use your vocabulary. For what purpose did you use the historical materials offered by these various people?

A . . . Well, for purposes that are stated on the paragraph at the bottom of 46, which is an introductory comment. In other words, to indicate that fishing was a cornerstone of Indian economy at the earliest period of French contact and that it remained an important economic pursuit until the 1930's. That's why those sources are used.

Q How many of these sources would have been alive in 1930?

MR. GREEN: Are you referring to the French traders and missionaries whom he earlier listed, or asking him all of the sources he can cite?

MR. FREEMAN: I guess . . .

THE WITNESS: I think only one source cited, maybe two, would have been alive in 1930.

Q (MR. FREEMAN) Which ones were they?

A Well, they would be the McKeel, Scudder McKeel, who described the situation among Indians on Beaver Island in 1937, and perhaps Smith and Snell would have been alive by then, who described --

Q You didn't cite those two when I asked you which original records, so there are additional records?

A Excuse me, yes. I should have included the pages 46 to 61. You're quite right.

Q Now, in how many cases did you read the original records as left by these people, the ones you have named?

A What do you mean by original records? I mean, almost all this stuff is, you know, -- Certainly I didn't read the handwritten documents in French.

Q Well, I'm looking, for example, on page 48. You refer to Sagard and to his visit to the Huron in 1623.

A Right.

Q But the source you cite is not Sagard. The source you cite is Rau, 1884.

A Right.

Q In that case, am I correct that Rau reviewed Sagard's writings, Rau wrote a text on it, you reviewed Rau's version of what Sagard had reported?

A That's correct.

Q Did you, in that instance, review what Sagard had written?

A Did I review what he had written?

Q (Nodding affirmatively.)

A Yes, I did.

Q Did you compare what Sagard had written in the original to what Rau had written?

A No, I did not. I used Rau as a secondary source in that case.

Q Why?

A Well, because I consider Rau to be a perfectly reliable source on fishing in North America, and that's why.

Q How much research have you done into fishing in North America?

A Ah . . . Substantial amount in certain areas in North America.

Q Which areas?

A Upper Great Lakes.

Q Well, you say a substantial amount. Tell us specifically what kinds of research you have done.

A Well, ethnohistorical and ethozoological research, including dozens of sites, from about 1960 until the present time. It's been an area of a long-term interest of mine.

Q By sites, you mean archaeological sites?

A Yes.

Q Have you done any original research into documents and historical records concerning the early commercial fishing in the upper Great Lakes?

A Have I done, did you say, original research?

Q Yeah.

A By this, do you mean have I read any of the original records that were made concerning those fisheries?

Q Well, in part. I'm not trying to define for you original research. It seems to me you are the expert on that. I'm asking you if, in your judgment, you have done something that you would characterize as being original research into the area, other than archaeological site examination?

MR. GREENE: I'm afraid I still don't understand that question. I don't know if you do (referring to the witness).

THE WITNESS: No, I really don't.

Q (MR. FREEMAN) Have you done anything other than examining sites?

A Yes, I have. I have examined both primary and secondary source material pertaining to historic fishing patterns.

Q What primary sources have you reviewed?

A Well, I have read through 30-some volumes of The Jesuit Relations, not in every word, but I have looked, numerous

times, at evidence or documents that are related to Indian fishing. I have looked over the Cadillac Journals, Schoolcraft, and others, which I don't recall at the moment.

Q Have you ever looked at the original papers of the American Fur Company?

MR. GREENE: Original papers? I'm afraid I object.

Q (MR. FREEMAN) Are you familiar with the American Fur Company?

A Yes.

Q What was the American Fur Company?

A It was a company formed by John Astor to prosecute the fur trade.

Q Do you know, based upon your research, whether or not the American Fur Company was involved in commercial fishing ventures in the Great Lakes?

A I know it. I am not prepared to discuss the details of it.

Q Have you ever had occasion to do any research into the papers of the American Fur Company, the original historical records as they have survived?

A From time to time, but not on this subject.

Q Are you familiar with the Gabriel Franchere, F-r-a-n-c-h-e-r-e, papers, Gabriel Franchere papers?

A No, sir, I am not.

Q Are you familiar with the records of the Fish Inspector at the Soo?

A I'm not.

Q Have you utilized the original documents available at the University of Minnesota Historical Society, relating to commercial fishing?

A No, I have not.

Q How about the Mackinac Island Port records?

A No.

Q The Peter Barbeau, B-a-r-b-e-a-u, papers, Peter Barbeau papers?

A No.

Q How about the John Livingston, L-i-v-i-n-g-s-t-o-n, papers?

A No.

Q Are you familiar with any of these?

A No.

Q I don't want you to feel that these questions imply that you're somehow incompetent or unworthy.

A No, I don't at all.

Q I don't want you to misunderstand the question.

MR. GREEN: Perish the thought.

Q (MR. FREEMAN) I'm really not as bad as they, your lawyers, claim. I'm really a nice guy. They have never taken the time to get to know me.

How about the Trowbridge, T-r-o-w-b-r-i-d-g-e, papers?

A No.

Q Have you gone into the Lewis Cass, C-a-s-s, or Lucius Lyon, L-y-o-n, papers at the William Clements, C-l-e-m-e-n-t-s, Library at the University of Michigan?

A In relationship to what?

Q In relationship to the extent, size, existence, whatever, of an Indian commercial fishery or a white commercial fishery in Michigan?

A Lucius Lyon describes that?

Q I'm asking you.

A I wasn't aware, no, that he described anything which had anything to do with commercial fishing.

Q How about the Rex Robinson, R-o-b-i-n-s-o-n, Rex Robinson papers, at the Grand Haven Public Library in Grand Haven, Michigan?

A Ah . . . What about them?

Q Are you familiar with them? Are you familiar with that?

A I'm familiar with Rex Robinson, but I'm not familiar with the fact that Rex Robinson had anything much to say about commercial fishing.

Q What did you understand Rex Robinson to have something to say about?

A He was a fur trader on the Grand River, worked with the

American Fur Company for a while.

Q Have you reviewed papers which -- any papers from any source which would give you an indication of how many barrels of fish were shipped from various Michigan ports by the American Fur Trading Company during the 1830's, '40's, and '50's?

A You mean do I remember that?

Q Well, have you ever looked into that question?

A No, uh-uh.

Q Do you think that is a significant point in terms of the kinds of things that are involved in this litigation?

MR. GREENE: I'm sorry, could I ask the reporter to read that question back?

(Whereupon, question was read by reporter.)

MR. GREENE: And now I wonder if I might ask Counsel to explain what he means by significant point?

MR. FREEMAN: No, I'll just go on to a different question.

Q (MR. FREEMAN) I think you give some very, very specific figures, Professor, in this report, concerning the barrels of fish, tons of fish, size of the fishery. What are those figures based upon?

A Which figures are you referring to?

Q On page 56 you have got some of them.

A Fifty-six?

Q Fifty-seven and fifty-eight.

A These figures are taken from the Smith and Snell report.

Q They are not based on any research you did, then; just on Smith and Snell?

A I wasn't around then. This has to do with 1885, so I had to rely on Smith and Snell, who were --

Q Did you examine reports from that period?

A Yes. Did I -- Did I examine Smith and Snell's records and field notes?

Q That isn't the question I asked, but it is a pretty good one. Did you?

A No, I didn't.

Q Did you examine the kind of historical materials; did you examine the historical materials which are available today relating to the size and extent of the fishery of years ago?

A Yes, I did.

Q What did you examine?

A I examined Smith and Snell.

Q And only Smith and Snell?

A Hmm . . . Relating to what period?

Q 1830. We'll make it 1820 to 1890.

A No, I did examine some other things that related to that.

Q What did you examine?

A Reports of the Michigan Fish Commissioners; article by

Herschel Whitaker, who was one of the early Michigan Fish Commissioners; reports of the U.S. Commission on Fish and Fisheries; some of which relate to the upper Great Lakes for that period.

Q On page 59, the second full paragraph, last sentence, you say, it is clear that prior to 1860, the entire upper Great Lakes fishery was almost entirely in the hands of Indians, half-breeds, and French Canadians.

What is your source for that statement?

A Hmm. . . This statement would be a summary statement which was drawn from a number of lines of evidence. Basically, it's reported that as late as 1885, as late as 1885 the fishery in the Lake Superior Basin was still in the hands of Indians and French Canadians.

Q Who reported that?

A Smith and Snell. Now, moreover, according to that same report and that late in time, Indian population in the northern portion of the Michigan and Huron Basins were also primary fish producers up until the time of the introduction of some devices which mechanized the fishing industry in the Lakes, namely the fish tug and also pound nets. Before the time that it was mechanized, it was prosecuted out of small boats with hand-held nets or hand-set nets, and the populations residing around the Lakes and the fishing communities were, for the most part,

Indians or half-breeds involving, in some way or another, French Canadians.

Q Now, what is your source for that, for your last statement?

A That's Smith and Snell, who took a survey. As part of their survey of Great Lakes fishing, they did take a census of the ethnic inclination of the people that were involved in the trades.

MR. GREENE: Is that report you refer to part of your appendix?

THE WITNESS: Yes.

MR. GREENE: And that's identified as Plaintiffs' Exhibit -- It's in the volume entitled Plaintiffs' Exhibit P-4 through P-7, and it's one of those numbers.

Q (MR. FREEMAN) On page 60, about eight lines down, you say prior to 1840, Indian fishermen controlled the production and marketing of fish in the upper Great Lakes. What is your source for that statement?

A Ah . . . The source of that is also to be derived from Smith and Snell. Prior to 1840, as far as any records that I could find, there were few, if any, other kinds of fishermen involved in fishing on the Lakes. There were a few, presumably a few Americans fishing in the lower part of the Lakes, particularly around in the lower part of Lake Huron, but otherwise, the population of the upper

Great Lakes country was, at this time, almost 100 percent Indian.

Q Now, what is it again, Smith and Snell?

A Yes.

Q That you're referring to? How about on page 70? Going down nine lines: At the time of the 1836 Treaty, the commercial fishing industry was developing very rapidly, and Indians were not only the major producers but also marketers of fish as well as the suppliers of nets, canoes and other fishing paraphernalia. What is your authority for that?

A Well, common sense, I guess. I don't think -- I don't think there were any other people involved at this point, in a major way, that were building birchbark canoes, making nets, and other fishing paraphernalia, as far as I know.

Q Well, to make sure I understand your answer, you're saying that the source of this paragraph is not Smith and Snell, but rather your deduction?

A Yes.

Q And you're saying that your research had covered no historical records of producers or marketers of fish in the 1830's?

A Oh, no.

Q Other than Indians.

A The French were marketing fish, we know, back in 1716. I mean -- and I'm sure that Europeans and Americans of various kinds were participating in the fishing and were marketing fish all the way through.

Q Then how did you --

A But what I'm saying in this sense is that the primary producers, major producers and marketers of fish at this period of time were Indians, because the population was predominantly Indian at this period of time, and that alone doesn't make the case, but we know very well that the whites did not get heavily into the fishing industry until it was mechanized in the early 1860's.

Q How do we know that?

A It's a matter of record. We know the names of the people, where they fished.

Q Slow down a second. What was your source for these records?

A Smith and Snell.

Q Did you look at the original records, or did you read what Smith and Snell said the original records showed?

MR. GREENE: I object, Counsel. That question has been asked and answered.

MR. FREEMAN: Not on this specific point, Counsel.

MR. GREENE: What specific point?

MR. STEKETEE: The specific point --

MR. FREEMAN: Major producer.

MR. STEKETEE: Yeah.

THE WITNESS: If the question is did I look at Smith and Snell's original field notes, the answer is no, I did not.

Q (MR. FREEMAN) But you concluded from a review of Smith and Snell that the Indians were the major producers, the marketers?

A That's correct.

Q Now, in the next sentence on that same page, you say, during 18- -- during 1840 and 1850 the industry continued to rapidly expand more than doubling production from seven million pounds in 1840 to 17.5 million pounds in 1860.

A Right.

Q And you cite Tody's article?

A Yes.

Q Now, does Tody say that the major producers and marketers were Indians?

A I don't recall that he did, no, although he may have.

Q Did you examine the records upon which Tody compiled the figures of 7 million and 17.5 million?

A He drew those figures from the reports, annual reports of the Michigan Fish Commissioners, which I did examine.

Q What did they show, the records of the Fish Commission?

A I thought Tody's conclusion on this point was quite accurate.

Q Is it fair to say, then, that it is your conclusion that 17.5 million pounds of fish were taken and that the majority of it, the major producer and the major marketer were Indians?

A Seven million pounds in 1840, is that the question?

Q Well, I was referring to 1860, but 1840, all right, take the seven million figure for 1840.

A Well, in this particular -- in this particular instance, I quote Tody. He did not say that. I would assume that the majority of that production, my own opinion is yes, the majority of that production was by Indian.

Q Do you feel that the records of the Michigan Fish Commission, then, reflect the number of pounds taken by Indians?

A As far as I know, those are the only records that we have for the period we are discussing.

Q But they would have to be based on something, would they not, presumably reports?

A No, they are GROSS statements, and everybody that has written anything about this period, the early half of this century, says that the statistics that are involved are very poor, that we really don't have much basis at all to conclude anything very accurate about production

in any regard. I certainly agree with that.

Q You say everyone says that? Who specifically says that?

A Hmm . . . Well, Herschel Whitaker said that. If I'm not mistaken, John Scott said that.

Q You're referring to Scott, the Chief of the DNR's Fishery Division?

A Yeah.

Q Let's suppose that I could produce for you detailed records of every barrel of fish shipped in the Michigan commercial fishery in the 1830's, '40's, and '50's, would that kind of evidence lead you to re-evaluate the position you have taken in this report?

MR. GREENE: Detailed records, Counsel?
With respect to the number of fish taken and by whom?

MR. FREEMAN: I said if I could produce it, would you consider that?

THE WITNESS: I suppose any new information -- I mean, I'd hate to have you think I was close-minded about this. If there is new information, yes, I would be glad to consider it.

Q (MR. FREEMAN) I'm saying, would you consider that significant information, recognizing --

A It depends, again, on the question you want to answer with it.

Q I want to know what degree of confidence you have in the

figures contained in your report as to the size and extent of the Indian commercial fishery?

A. Well, as I have already said, quoting from various authorities that have written on this subject, the primary data is very bad, so any better data would be welcome.

Q. Is there any substantial document you used, that is, any document substantially important to you in writing this report, other than Smith and Snell, on the question of the size and extent of the commercial fishery?

A. I regard Smith and Snell to be the first comprehensive report on the condition of the commercial fisheries in the Great Lakes.

Q. And your role, then, in the drafting of this report has been to try and place in simple language the conclusions you feel are inherent in the Smith and Snell study?

A. These are the conclusions that I would draw based upon the material that I examined. These are not the conclusions of Smith and Snell.

Q. Well, did you examine materials other than Smith and Snell?

A. Yes.

Q. What did you examine?

A. Well, I have already told you I examined the reports of the Michigan --

Q. The Fish Commission? Anything else?

A. I examined the review papers written by Scott, by Tody,

and various papers published by the U.S. -- or the Michigan Fish Commissioners, relating to Michigan fisheries, including a historical view by Herschel Whitaker.

Q Are there any other documents you used?

A Other than the ones that are cited in here?

Q Other than what you named and cited.

A Are there other ones that I used? Concerning what period, do you mean?

Q The same period we're talking about, 1820, 30, 40, 50, 60, 70, 80. Someplace in there.

A Well, I can't think of others offhand.

Q Did you ever hear of Professor Grace Lee Nute, N-u-t-e, of the University of Minnesota?

A No.

Q Never heard of her?

A (Witness shaking head negatively.)

Q You used, as we noted earlier, the text on canoes by Adney and Chapelle. Are Adney and Chapelle still alive?

A I have no idea.

Q How about David S. Brose, B-r-o-s-e, is he still alive?

A Yes.

Q Who is David Brose?

A He's a Professor of Anthropology at Case Western Reserve University.

Q How about William S. Donaldson, D-o-n-a-l-d-s-o-n, is he still alive, if you know?

A I believe so. He is a Canadian Archaeologist that works for the National Museum in Canada.

Q Is he competent?

A Yes.

Q How about James B. Fitting, F-i-t-t-i-n-g, is he still alive?

A Yes, he is.

Q Is he the James Fitting that is or was employed by the Secretary of State?

A Yes, he was.

Q James B. Griffin, G-r-i-f-f-i-n?

A Yes.

Q Is he still alive?

A Yes, he is.

Q Who is he?

A He's a very eminent North American Prehistorian, University of Michigan.

Q Margaret Holman?

A Yes, she is still alive.

Q Who is she?

A She's a graduate student at Michigan State University.

Q What's her connection to you, if any?

A She is my graduate student, working on data from northern

Michigan.

Q And you, in turn, used one of her articles in preparing this report?

A That's right.

Q How about Robert Hruska, H-r-u-s-k-a?

A Yes, he's alive.

Q Who is he?

A Curator of Anthropology at Oshkosh Public Museum.

Q How about Donald E. Janzen, J-a-n-z-e-n?

A Yes, he's alive.

Q Who is he?

A Anthropologist, Kentucky Central University.

Q And Herbert C. Kraft, K-r-a-f-t, who is he?

A He's an Archaeologist at Seton Hall University.

Q That's in New Jersey?

A I believe it is, yes.

Q Is he still alive?

A Yes, he is.

Q G. H. Lawler, L-a-w-l-e-r?

A Lagler? Is he still alive?

Q Yeah.

A Yes.

Q Who is he?

A He's a Fisheries -- He was an Ichthyologist at the University of Michigan.

Q What is an Ichthyologist?

MR. GREENE: May I interrupt for a moment?
I'm looking at page --

THE WITNESS: It's -- Yes, this is correct
and I'm wrong. He is not at the University of Michigan.
I don't know where he is. I was thinking of Lagler.

MR. GREENE: Do you see that, what he's
referring to, Hubbs, Carl and K. F. Lagler, on that same
page up above the L-a-w-l-e-r reference?

MR. FREEMAN: Um-hmm.

THE WITNESS: I thought you were referring
to Lagler.

MR. FREEMAN: I was talking about Lawler.
The poor Court Reporter is never going to understand what
we're talking about here.

MR. TAYLOR: She's not the only one.

MR. GREENE: Off the record.

(Whereupon, there was a brief recess.)

Q (MR. FREEMAN) Before the break, Professor, I was asking
you about some of the authorities you relied upon,
whether they were still alive.

A Yes.

Q Who they were. Just a couple more questions like that.

A Okay.

Q Well, let me make it just a general-type question. I'm

looking at the back of your report here at page 75.

A Okay.

Q Now, from the dates of publication, all of the things cited on page 75 seem to be very recent publications, one going back to 1952; most of the rest in the '70's. Are there any of these people that, to your knowledge, are now deceased, the '70's?

A Not to my knowledge.

Q Are these people all competent professionals, in your judgment?

A . . . Well, I think we're back to where we were two hours ago. By and large, yes.

Q But you wouldn't necessarily rely upon any one of them for everything that they had written professionally?

A No, sir, I wouldn't.

Q That is correct.

Would the same be true of all of those still alive that you list on pages 76, 77 and 78?

MR. GREENE: I would suggest you take a moment to review them. There's quite a number of references listed on those three pages.

THE WITNESS: Could you repeat the question, Mr. Freeman?

Q (MR. FREEMAN) I asked if you would give the same kind of an answer in regard to the rest of the authors listed?

A I would give the same kind of an answer in regard to any author. I think that of those included here, that these are, by and large, reliable observers.

Q Did you or have you had occasion to review the records of the Michigan Superintendentcy of Indian Affairs, which is known as Record Group 75?

A No, I haven't.

MR. GREENE: Record Group 75 in the National Archives?

MR. FREEMAN: Yeah, National Archives?

Q (MR. FREEMAN) Have you had occasion to review the Ayer, A-y-e-r, collection of the Newberry Library in Chicago, Illinois?

A No, sir, I have not.

Q How about the records of the Wisconsin State Historical Society? Have you had occasion to review them in connection with any of the questions covered in your report?

A No.

Q How about the Houghton, H-o-u-g-h-t-o-n, the Houghton Library at Harvard University, Boston, Massachusetts?

MR. STEKETEE: Cambridge.

Q (MR. FREEMAN) Cambridge, I'm sorry. You see I'm very local in regard to school. If we can figure out where that library is, have you had occasion to be there and

do any research?

A No, I haven't.

Q Have you ever had occasion to look at papers of the American Board of Commissioners for Foreign Missions?

A In specific reference to what?

Q To the --

A I mean, I have been to the Wisconsin Historical Collections. I have seen those papers and so forth, but with specific reference to Indian fishing?

Q Yes.

A No, I have not.

Q Do you know if there's anything in those papers that relates to the question of Indian and commercial fishing?

A No, I do not.

Q Have you had occasion to look at the Indian and fur company collections in the Canadian National Archives in Ottawa?

A No, I haven't.

Q How about the papers in the Bayliss, B-a-y-l-i-s-s, the Bayliss Library in Sault Ste. Marie, Michigan?

A No, I haven't seen those papers, either.

Q Do you know what sort of papers might be in the Bayliss Library?

A In a general sort of a way, I would imagine like most libraries like that, probably local historical collections

and papers of that kind, I would imagine.

Q Well, do you think local historical collections would be relevant to this, if they were local collections from the Sault Ste. Marie area?

A Sure, sure.

Q So they might be relevant, but you have not yet had occasion to look at them?

A That's right.

Q How about in the University of Michigan historic collections, you have gone into those?

A No.

Q Do you know if there are American Fur Company records as part of the University of Michigan historic collections?

A Yes.

Q Do you know if they show anything about commercial fishing?

A I'm sure that they do.

Q What was the last word? They do?

A Yes, they do.

Q Wouldn't you consider that relevant, to see what the American Fur Trading Company was doing during the historical period in question?

A Well, it would again depend upon the specific problem that was involved.

Q How about the Burton historical collection of the Detroit Public Library? Have you had occasion to get into that?

A No.

Q Isn't that the main repository for the papers of Henry Schoolcraft, George Johnson, Samuel Abbot?

A Yes, that's true.

Q How about Woodbridge? His papers are there, too, aren't they?

A I don't know about that.

Q Have you had occasion to look at Lewis Cass' papers at the University of Michigan?

A In regard to this research?

Q Yes.

A No.

Q Where did you obtain the records of the Michigan Fish Commission? What source?

A The State Library.

Q Where are they housed in the State Library, what section?

A The Michigan Room.

Q Are there other sources about commercial fishing in that same collection?

A Yes, um-hmm.

Q Isn't there a very large commercial fishing section donated by the old Department of Conservation?

A (No response.)

Q Well, you may not know the source. Isn't there a large collection of commercial fishing materials in the

possession of the State Library, housed near the records of the old Fish Commission?

A Ah . . . ah . . . There are published sources there that I have examined that are relative to this problem.

Q What leads you to conclude that Smith and Snell was the best available study of this period?

A Because it seemed to me to be a systematic study. In other words, a survey was undertaken around the peripheries of all the Lakes. There was certain kinds of information that was collected in each locality, at each port, at each fishing port, so that data that were collected are comparable from one water body or one portion to another, or from one portion of a water body to the other.

Q Now, Smith and Snell published their study in 1885, is that right?

A 1891.

Q 1891. And it concerned what period?

A 1885. There I might say that their statistics were taken in that year, although they did make historical observations.

Q And what period did they make historical observations back to?

A Well, I couldn't recall specifically, but they make historical comments relative to development of commercial

fishing in the Lakes.

Q They were reaching back to the period of --

A Yes.

Q -- the 1830's, though, weren't they?

A I could not be certain, off the top of my head, whether they reached that far back.

Q Do you know if they relied upon written materials or oral interviews in going back before 1885?

A My recollection is that they relied on both.

Q They reached back 50 years. They would have been using records that, even then, would have been regarded as historical, would they not?

A If they did reach back 50 years, yes, they would.

Q If they didn't, some of your conclusions about 1830 are a little bit shaky, aren't they, since you relied upon Smith and Snell?

A In what way would they be shaky?

Q Well, the figures you had in your report, I think, unless I misunderstood you, you primarily based your report upon the Smith and Snell study.

A The figures presented from 1830 are from Wayne Tody's review of the history of the fishery, and his were drawn from the Michigan Fish Commissioners' reports.

Q And the importance of the commercial fishery to the Indians, would you base your conclusions in that regard

on Smith and Snell or on some other source?

A. Well, I would say on all of the historic sources that are -- If the question is how did I conclude that fishing was important to the Indians, then it's by the use of a great variety of ethnographic and historic resources, including Smith and Snell.

Q. Did any of those sources specifically deal with fish for commercial as contrasted to fish for subsistence?

A. Well, yes. This is, you know, basically a commercial enterprise we are discussing, but that does not preclude fishing for the table. One does not preclude the other.

Q. I understand it doesn't preclude. I'm trying to fix the relative importance of the two.

A. Oh.

Q. It is your conclusion, if I correctly read your report, that commercial fishing existed and was important, am I correct, which implication would seem to mean that the Indians had a more than adequate food supply for their people? You wouldn't expect someone who was hungry to be exporting food, would you?

A. Well, I'm not clear about what you're asking.

Q. Did you find any information concerning the level of, or the quality of life of the Indians in the 1820's forward? Were they, in all the years you are aware of, possessed of an adequate supply of food for their own people?

A I would say they have never been.

Q Are you aware of any documents which seem to -- would seem to indicate that there were Indian groups suffering from malnutrition or starvation during the period of 1820 forward?

A Well, with the understanding that my knowledge of this question area is very general, I would be willing to say I know of no specific description of malnutrition. I do, however, recall, although I cannot at this point specifically name, descriptions -- well, yes, I could, too. Description of Indians being poor, in a poor condition, living in conditions of poverty. I think that that is more or less true throughout the period in which we have historic records, including today.

Q Did you find any evidence that in times of problems with food supply, the Indians were, nonetheless, engaged in commercial ventures with fish or game?

A Well, problems with food supply were seasonal problems, primarily. In other words, Indians suffered a period of deprivation practically every winter. The period where they were able to fish commercially was the summer period and was also the period in which they had a lot of food. As they became more and more involved in commercial activities of all kinds, including commercial fishing, they began, at the same time, to participate in a cash

economy which alleviated somewhat the subsistence problems that they would have during the winter.

Q You're saying that they were paid cash for the fish as opposed to barter?

A Well, it depends. It depends when you're talking about. If you're talking about 1716 or are you talking about 1930, but if you're talking about the first, it may be that there was a barter system involved. And by the end, it may be that somebody was working for so much an hour on a fish tug. It's still participation in a commercial system.

Q But probably working for someone else, is that correct?

A You mean at that later period? After 1860 the chances were, yes.

Q Now, let's go back to the 1820's, 30's, 40's, in there. Do you know when the Indians began to take fish in the abundant times, during better weather conditions, salt them and put them in barrels for use during the winter?

A Hmm . . . I would assume that that pattern was part of the commercial fishing industry that related to American or European settlement and, therefore, at about the time you mention.

Q You're saying, if I understand you correctly, that the Americans or Europeans would provide the barrels, perhaps the salt, and show the Indians how to do it, and that's

how they came to do it?

A. No, because there are documents which tell us that, in fact, Indians were frequently employed making barrels; woodworking was one of their specialties. But the aboriginal and early historic pattern of preservation was one that was based on smoking. Now, some very small proportion of fish that entered the commercial market was also smoked, but most of it was sold fresh, and a fairly substantial amount was sold salted in barrels.

Q Were those fish in wooden barrels or metal barrels?

A Wooden barrels.

Q You're sure? By and large, you have examined documents which told you that? That's what I mean by you're sure?

A I have not ever seen the wooden barrels, but I have read the descriptions of Indians making barrels, and I assume that they weren't out there with big pieces of metal, making them. Maybe that is an illfounded assumption, but I would be pretty sure that they're wooden barrels.

Q You have never seen references to metal barrels being used in commercial --

A No, I haven't.

Q -- commercial fishing ventures in Michigan?

Have you ever seen any references to the United States Government providing metal barrels --

A No, I haven't.

Q -- as reservoirs?

A No, I have not seen those references.

Q Do you know of any documents which indicate the number of barrels of fish which the Chippewa in Michigan would have to have set aside in the 1830's, 1840's, or 1850's, to have provided them with an adequate food supply to see their people through the winter? Do you have any idea of what number of barrels that might be?

A No.

Q Do you know if the United States Government took any action subsequent to 1836 to protect Indian fisheries and keep non-Indians from using those fisheries?

A In a general way, offhand, yes.

Q Do you know specific documents on it?

A Well, this aspect of the testimony I would assume would be that that another witness is going to testify to.

Q That would be Dr. Tanner's testimony?

A Yes.

Q Well, maybe I'll save the questions I was about to ask for Dr. Tanner, then.

Do you want to do anything further today?

MR. STEKETEE: We might as well use the next 20 minutes.

RE-EXAMINATION

BY PETER W. STEKETEE, Esq.:

Q Doctor, have you seen the second Helen Tanner report?

A No, I have not.

Q Are you contemplating any supplemental report yourself?

A No, I am not.

Q What specific instructions were you given by your client, or by the people who retained you to testify in the trial, as to the preparation of your report?

A I was to investigate the history and prehistory of Great Lakes fishery as it evolved and evolutionary aspect of Indian culture, I suppose we could say.

Q Well, specifically, were you given any procedural instructions?

A Such as?

Q To prepare a written report, for example.

A Yes, right. I was asked to prepare a written report.

Q Was the report that was submitted to the Court and to the Defendant the original draft that you submitted to your clients?

A They saw a rough draft.

Q Did they suggest some changes in format or substance?

A No, they made some editorial suggestions to me.

Q Could you tell me what they were?

A Oh, they weren't -- they weren't of such significance

that they really -- I will admit to being a horrible speller, and the first time, I think, that perhaps Mr. Greene saw the report, the report was full of spelling errors which he helped me with. Other than that, I could not really recall any, any changes of any kind that were made.

Q You still retain a draft copy of your -- a copy of the draft report?

A I really don't know. I would have to look in my file.

Q Do you know whether you have a copy of the report with Mr. Greene's comments on it?

A I don't know whether I do or not.

MR. STEKETEE: Now, Mr. Freeman, if I may, could I have that report written by Dr. Cleland?

MR. TAYLOR: Yes, it's right here.

MR. STEKETEE: I'm speaking of the one done for secondary schools.

Q (MR. STEKETEE) Doctor, you are the author of this paper, A Brief History of Michigan Indians?

A Yes, I am.

Q What was the occasion for writing that?

A The Division of Michigan History has, for a long while, published a pamphlet or bulletin on Michigan Indians. The one that they had by Emerson Greenman had received some adverse comment from the public, and they were

anxious to have a rewrite done of the pamphlet, and so asked me to do it.

Q What was the nature of the adverse comment received on the prior report?

A I was never told. Well, I was told that it had something to do with the tone of the publication.

Q Was it negative towards Indians?

A I think most likely it was not positive.

Q Condescending?

A It was not positive enough.

Q I see. When did you write this report or this paper?

A Hmm . . . Could you remind me of the date of publication?

Q It says copyright 1975.

A Well, I wrote it in --

Q 1972, perhaps?

A -- '72 or '73, one or the other.

Q All right. What part of this publication are you responsible for?

A All of it.

Q Are you responsible for photographs?

A You mean, did I take them?

Q Yes.

A No, I only selected them.

Q You did select them?

A Yes.

Q Did you write the captions to the photographs?

A Yes, I did.

Q Did you write the entire report yourself?

A Yes.

Q I believe you stated that you didn't consider it authoritative before, is that correct?

A Well, that was before we redefined authoritarian, authoritative.

Q Authoritative?

A Yeah.

Q How did we redefine authoritative? Would you remind me of that, please?

A Well, as I recall, I said that I was not willing to accept any statement that was made by any author simply because they happened to be respected or honest or trustworthy, because I think that people are naturally biased in what they say one way or the other.

Q Well, it wasn't my understanding, Doctor, that that was what you were saying when you made your comment with regard to this particular report, because you added to your comment at that time, if I recall, that this was prepared for secondary, as a secondary text.

A Right, right.

Q For secondary schools, you mean?

A This isn't a publication that one would go to to do

research. On the other hand, I would hope that it would be an honest portrayal of the subject matter it purports.

Q By your statement, do you mean that this was intended for secondary schools, or this was intended as a secondary source?

A No, it was a source written so that it would, hopefully, be used by school children.

Q In secondary schools?

A Yeah.

Q In other words -- All right. Did you, then, mean that your article was not intended to be comprehensive but that it was --

A That's right.

Q -- it was intended to be accurate?

A That's right.

Q You don't believe that text books intended for secondary school children should purposely be inaccurate?

A That's fair.

Q And you did not make this purposely inaccurate?

A That's correct.

Q As far as you know?

A As far as I know.

Q Now, in writing this, did you go -- do you recall what sources you used in writing this report?

A Some of the sources used are listed in the back under the

recommended reading, I believe.

Q All right.

A I don't think this is an exhaustive list of the sources, however.

Q All right. Let me read you from page 23 --

A Okay.

Q -- of the report, and let me ask you some questions about what you have stated.

A Okay.

MR. GREENE: Excuse me, may I interrupt?

Do we have another copy of that here that perhaps the witness might want to look at? Does anyone have a second copy?

MR. STEKETEE: It's almost five o'clock.

Why don't we stop, and I'm sure the witness at home has --

MR. DILLON: I'm dying to hear what is said on page 23.

Q (MR. STEKETEE) Doctor, you write: Apparently, between 1807 and 1864, the Americans treated with the Indian tribes to acquire most of the 57,900 square miles that compose the State of Michigan. In 1806 the Indians owned almost all of this land, 57 years later they held only 32 square miles -- less than a single township. The Indians seldom wished to sell their lands but were forced to do so by government negotiators who were often

unscrupulous in their dealings. They effectively used the influence of half-breed traders, manipulated one tribal faction against another, took advantage of the trader debt system, and on most occasions drugged the opposition with whiskey, all to separate the Indian from his lands. Michigan Territory's famous Governor Lewis Cass was one of these government agents.

Now, did I read that correctly?

A Yes.

Q All right. And you are the author of it?

A Yes, I am the author of that.

Q Let me ask you some questions about this.

A All right.

Q When you say that the Indians owned all of Michigan, what you do mean by that?

A Well, I mean that perhaps there was some legal recognition of prior right of occupancy.

Q Are you a lawyer?

A I said perhaps.

MR. GREEN: "Are you a lawyer?" That question has been asked and answered.

THE WITNESS: I think I have already answered that question.

Q (MR. STEKETEE) And you already answered that question?

A That's right.

Q Do you know --

A By right of occupancy.

Q -- why the Indians owned the lands?

So you're assuming that right of occupancy was the right of ownership?

A I do know that a lot of treaties were written with the Indians, in which they were compensated one way or the other for lands that they occupied, and I hardly think that would happen if there wasn't some recognition that they had some rights to it.

Q All right. What is your source for the statement? Just what you have said?

A Yes.

Q All right. You state that the Indians seldom wished to sell their lands but were forced to do so by government negotiators who were often unscrupulous in their dealings. What is the source for that statement?

A Well, we could take, as an example, the Treaty of Saginaw in 1819.

Q What about the Treaty of 1836? In that case, were Indians forced to sell their land by unscrupulous government negotiators?

A I don't have the detailed knowledge of that Treaty to be able to answer that.

MR. DILLON: I object to an answer because

I think that's outside the scope of testimony on which he is being offered as a witness, but I wish he would answer the question, for example, as to the 1819 Treaty of Saginaw.

Q (MR. STEKETEE) Well, I didn't ask him that question.

MR. DILLON: You asked him, and you didn't let him finish his answer.

MR. FREEMAN: We'll give you an opportunity, Counsel. Don't worry. Your turn is coming.

Q (MR. STEKETEE) All right. What evidence do you have as to the Treaty of 1836 or the Treaty of 1855 that --

MR. DILLON: Object to his answer. He is not being offered for this purpose.

MR. STEKETEE: You may have a continuing objection. May I ask the question?

MR. DILLON: I'm just --

MR. STEKETEE: You're instructing him not to answer?

MR. DILLON: Would you like to specify which questions I have a continuing objection to before I object to them?

MR. STEKETEE: Well, you have been interrupting me, Counsel, for several minutes now, and I assumed it was all relating to one subject, and I assumed that you would like to take a continuing objection so

that you wouldn't have to interrupt me anymore.

MR. DILLON: As to his testimony as to the 1836 and 1855 Treaty?

MR. STEKETEE: All right. Very well.

Q (MR. STEKETEE) As to the Treaties of 1836 and 1855, what evidence do you have, Doctor, that the Indians did not wish to sell the land in question but were forced to do so by government negotiators who were unscrupulous in their dealings?

A I'm not specifically familiar with those two Treaties, and therefore, I don't feel qualified to answer the question.

Q Do you have any evidence at all?

A Yes, the Saginaw Treaty of 1819.

Q As to the two Treaties I listed.

MR. GREENE: I object, Counsel. You asked the question. He answered the question, I believe.

MR. STEKETEE: He's qualifying the question.

MR. FREEMAN: Let me note, too, for the record, his answer is in variance to his written report he sent to us with the demand for admission.

MR. GREENE: I'm sorry. You're referring to this report?

MR. FREEMAN: Yeah. I think there are conclusions stated as to the Treaties of 1836 and 1855 in

his report.

MR. GREENE: With respect to --

MR. FREEMAN: That was why we refused to admit the authenticity of certain parts of it because we were concerned with those various parts in that report.

MR. GREENE: I will debate that with you off the record, but not now.

MR. FREEMAN: It shows how smart I was to deny that part.

Q (MR. STEKETEE) Again, as to the Treaties of 1836 and 1855, what evidence do you have that the negotiators for the government effectively used the influence of half-breed traders, manipulated one tribal faction against another, took advantage of the trader debt system and possibly drugged the opposition with whiskey to separate the Indians from their lands?

A I'm not specifically prepared at this time to discuss those two Treaties.

Q Do you have any evidence at all with regard to those two Treaties, as to the questions I just asked you?

A Do I have at this time?

Q Yes.

A No, I don't.

Q All right. And you haven't lost anything between the time that you wrote this and the present, have you?

MR. GREENE: Lost anything?

Q (MR. STEKETEE) Lost any evidence.

A In what regard?

Q Did you have some evidence in 1972 that you don't have today?

A I stand by the statement in general and will support it with specific instances where I am prepared.

Q All right. Is it fair to state that in your statement that I read into the record --

A Yes?

Q -- that you infer that Lewis Cass was an unscrupulous government negotiator?

A Yes. I regard him so.

Q All right. What evidence do you have that Lewis Cass was an unscrupulous government negotiator?

A Would you like to hear about the Treaty of 1819?

Q Yes. I'd like to hear your answer.

A Okay. Lewis Cass. The Treaty of Saginaw in 1819 was one that was negotiated by Lewis Cass. At the point which he was prepared to negotiate that Treaty, he discovered, before his departure from Detroit to Saginaw, that the government had already owed the Saginaw Chippewa somewhere in the order of \$8,000, as I recall -- that may not be specifically correct -- and he went to the Bank of Detroit for a loan, and in order to pay that

amount of money before he commenced to negotiate the next treaty and, as he reported, was able to secure the loan. The Board of Directors of the Bank of Detroit were all people who were involved, in one way or the other, at that point, in the Indian trade. There was a great deal of reluctance on the part of the Saginaw Chippewa to negotiate this treaty. Most of that reluctance centering around Chief Kissigon, and it was soon realized that this opposition would crystallize in such a way that that treaty would not be negotiated. Cass persuaded certain of the traders that were involved in these negotiations, Smith and others I've forgotten at this point, to use their influence in order to persuade those factions who wanted to enact the treaty to do so. One of the techniques used was to bring in large amounts of whiskey, which was done. This whiskey was disbursed through the white traders. The white traders, in fact, kept Kissigon drunk for a matter of weeks while the treaty was negotiated, and the treaty was eventually settled. The money that was involved soon passing directly into the hands of white traders; in some cases not even going through Indian hands at all, but directly from the government to traders in repayment for debts that the traders had claimed against the Indians. That, in the barest minimum, is some evidence that alcohol was used,

used heavily; that in my view, which is what this is, the Indians were defrauded from their lands, and that negotiations were conducted by people who were unscrupulous, including Cass.

Q Including Cass in particular in this case?

A In particular in this case.

Q All right. You told a rather elaborate story. I gather you weren't an eye witness to these events?

A No. That's true. I wasn't.

Q What is the source of your information?

A The principal source of this information is the History of Saginaw and Shiawassee Counties, which is one of the county histories.

Q For my edification, what do you mean by one of the county histories?

A Well, there are county histories that have been done for a number of Michigan counties, a great number of Michigan counties.

Q Do you know who the author of this history was and when it was written?

A Well, they are written by various authors, and I cannot, frankly, recall the author of that specific portion of the volume at this point.

Q Yet you vouch for its accuracy?

A Yes. I would vouch for its accuracy as much as I could,

not having been there.

Q All right. Very well. Do you have any evidence relating to along the lines that you have just given, tending to show fraud or undue influence with regard to the Treaty of August 2, 1855, which should be distinguished from the Treaty of July 13, 1855?

A I'm not prepared on that point.

Q Have you ever heard of the Treaty of August 2, 1855?

A Yes.

Q But you don't have any such evidence?

A No, no, I don't.

Q All right. Doctor, would you repeat for me again the areas of your specialty with which you have been asked to testify at this trial?

A Ethnozoology, namely the way in which Indian people interacted with the fauna around them.

Q All right. The study of the Indians' use of, abuse, if there was abuse, of plant, animals, fish?

A Animals, primarily, in this case.

Q All right. And could you tell me what courses did you take throughout your educational career that qualified you as an expert in this subject? What disciplines did you study?

A Well, I took a number of courses that bear upon this. I didn't take any specific courses in the field of

ethnozoology. As far as I know, there aren't any in the American Universities. I took courses in Mammology, in Ecology and Limnology. I took courses in Archaeology and Cultural Anthropology, and from that I suppose distilled out elements that contribute to the study of this topic.

Q Is it fair to say that your training in this field was primarily directed towards the interpretation of artifacts, of material, organic or otherwise, taken from sites; things of this kind, as opposed to interpreting historical documents?

A By training I am an Anthropologist, not a Historian. On the other hand, history is, a historical document, while entailing some specialization, historiography constitutes a specialty in the same way dealing with pottery constitutes a specialty. There is, I think, a special understanding which comes from interpreting those historic records, when one is speaking about Indian culture and how they relate to Indian cultures specifically.

Q All right. Now we're talking about, at least during a portion of your testimony, at least, we're talking about a period of time in which there are both artifacts from digs --

A Yes.

Q -- and historical documents of various types. Now, would

you say that your expertise is primarily in the area of interpreting the finds of these archaeological expeditions, or do you consider yourself able and competent, fully competent to interpret historical materials?

A I think that I am competent to interpret historical materials in light of . . . within a particular cultural context, and here, specifically, Great Lakes Indian populations. In other words, I do not claim expertise in historiography. I don't claim expertise as an archivist, but I do think that I know something about interpreting historic documents in light of events, places and cultures.

Q Well, let me see if I can get at this some way differently: Did you approach your task from the standpoint of interpreting the Treaty of 1836 or Treaty of 1855?

A Oh, no. That, I would assume, would be something that a historian would do.

Q You have nothing to say on that subject?

A Nothing that I suppose I would be any more informed than somebody that's interested in it.

Q All right.

A I don't think that I'm an expert in that area.

Q So you did not regard it as your function to interpret

the Treaty and say what the Treaty meant?

A. No, not at all.

Q Neither Treaty?

A. Neither.

Q Your function, then, if I'm correctly interpreting what you're saying, was simply to find out what the truth was with regard to the nature and extent of Indian fishing.

A. Yes.

Q As of what time period or periods?

A. Well, all the way through.

Q To when?

A. Well, in my report I went to 1930.

Q All right. Now, doesn't there come a period of time when a written document became predominant in the determination of what was going on as opposed to artifacts or stone boulders with gouges on them?

A. Yeah, if you're talking about 10,000 years, sure. You know, artifacts became less important and documents became more important as artifacts became less numerous and historical documents became more numerous.

Q All right. Do I understand the contribution that you can make to the interpretation of what was going on became number of proportionately less as the documents and their importance increases?

A. Well, there seems to be a disagreement about that.

Q I don't know that there is. I haven't heard any disagreement this afternoon. What do you think?

A I would suppose that that depends upon how -- how the documents are interpreted, which I think is the important point of consideration. Not, well -- I'll let it go at that.

Q But you consider it your function or your specialty to interpret those documents, whatever they might be?

A That's a pretty open-ended question, Mr. Steketee.

Q Well, didn't you, Doctor, in preparing this report, starting at page 46, select certain documents that you quote from?

A Yes, I did that.

Q The process -- In the process of selection, you were making a kind of professional judgment that these documents were important; that they were truthful, didn't you make that judgment?

A Yes, I suppose so.

Q Can't we suppose that, to make that judgment, one must have a certain fundamental knowledge of whatever other documents exist that might bear on this question, and that this knowledge is the repository of some branch of knowledge that we can give a name? Is that true?

A Like history?

Q Yes.

A Okay, right.

Q All right. And you're not a historian?

A I'm not a historian.

Q All right. But in preparing at least this portion of the report, starting on page 46, you were acting as a historian, weren't you?

A No, I don't think I was.

Q What were you doing, then?

A I think that I was making some observations about the relationship between Indians and certain animal resources, namely fish, and trying to look at the total evolutionary progression of their involvement with those species, and I never pretended that this would be a full, complete review of the historical records that bear upon this topic.

MR. STEKETEE: All right. I think that's probably a good place to cut this off this evening. We will commence in the morning.

(Whereupon, proceedings concluded at approximately 5:10 P.M.)


(End of Record.)

STATE OF MICHIGAN)
) SS
COUNTY OF INGHAM)

I, Dorothy J. Falk, Certified Shorthand Reporter and Notary Public in and for the County of Ingham, State of Michigan, do hereby certify that the foregoing Deposition was taken before me at the time and place hereinbefore set forth.

I further certify that said witness was by me duly sworn in said cause; that the testimony then given was reported by me stenographically, subsequently dictated by me, and transcribed under my direction and supervision; and that the foregoing is a full, true and correct transcript of my original shorthand notes.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 28th day of December, 1976.


Dorothy J. Falk, Certified Shorthand Reporter, Certified Proficient, Registered Professional Reporter and Notary Public, County of Ingham, State of Michigan.

My Commission Expires: 5-23-78.

A F F I D A V I TIN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
NORTHERN DIVISION

UNITED STATES OF AMERICA, et al,

Plaintiffs,

-vs-

No. M 26-73 C.A.

U.S.D.C.

STATE OF MICHIGAN, et al,


Defendants.

In re: Deposition of CHARLES E. CLELAND, Ph.D. taken
Monday, December 13, 1976, at Lansing, Michigan.

The attached corrections were requested by Dr. Cleland.


Correction No. 25, listed as on page 158, I believe
should be listed as on page 153.

Corrections have been made to the original in
accord with the said list, and the original has
been signed by Dr. Cleland at the end of his
testimony and has been filed with the appropriate
Court.


Dorothy J. Falk, C.S.R., C.P.,
R.P.R., Notary Public,
Ingham County.

My Commission Expires: 5-23-78

In Witness Whereof:


Priscilla Johnston Lowes
Notary Public, Ingham County.

My Commission Expires: 10-4-78.

Enclosed is the Deposition of CHARLES E. CLELAND, Ph.D., for signature. If there should be corrections, please do not write on the original. Please list below the page number and line and the correction to be made and the reason for same.

✓ 1. page 3 line - 5	Jenison	should be	Denison
✓ 2. p. 10 L. - 3	burying grounds	" "	barren ground
✓ 3. p. 34 L. + 1	Wawautum	" "	Wawatam
✓ 4. p. 37 L. + 1	serial	" "	sterile
✓ 5. p. 44 L. + 12	Phenis	" "	Phenice
✓ 6. p. 44 L. + 13	University of Michigan	" "	Michigan State University
✓ 7. p. 57 L. - 4	calanite	" "	catlinite
✓ 8. p. 60 L. - 11	calanite	" "	catlinite
	(occurs twice in the line)		
✓ 9. p. 60 L. - 8	calanite	" "	catlinite
✓ 10. p. 66 L. - 12	wier	" "	weir
✓ 11. p. 69 L. - 6	Travellers	" "	Traverse
✓ 12. p. 86 L. - 7	skeletonized	" "	skeletons of
✓ 13. p. 95 L. + 2	insert ? after	streams	
✓ 14. p. 105 L. + 11	explain	should be	explain
✓ 15. p. 107 L. - 13	phoenetics	" "	phonetics
✓ 16. p. 118 L. + 2	the	" "	The
✓ 17. p. 118 L. + 2	relations	" "	Relations
✓ 18. p. 122 L. - 9	the	" "	The
✓ 19. p. 122 L. - 9	relations	" "	Relations
✓ 20. p. 122 L. - 5	the	" "	The
✓ 21. p. 122 L. - 4	relations	" "	Relations
✓ 22. p. 130 L. - 2	the	" "	The
✓ 23. p. 130 L. - 1	relations	" "	Relations
✓ 24. p. 144 L. + 3	A Historical View	" "	a historical view
✓ 25. p. 150 L. + 8	undertaking	" "	undertaken
✓ 26. p. 166 L. + 6	territory's	" "	Territory's